IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

ILLINOIS TOOL WORKS INC., a Delaware Corporation,	)	
Plaintiff,	)	
v.	)	C.A. No. 06-054-GMS
FRITO-LAY NORTH AMERICA, INC., f/k/a RECOT, INC., a Delaware Corporation,	)	
Defendant.	)	

APPENDIX TO ANSWERING BRIEF OF ILLINOIS TOOL WORKS IN OPPOSITION TO FRITO-LAY'S MOTION THAT THE COURT NOT CONSIDER THE ISSUE OF PATENTABILITY OF THE CONTESTED SUBJECT MATTER IN THIS ACTION

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February 15, 2007

APPENDIX TABLE OF CONTENTS

CERTIFICATE OF SERVICE

I, Rodger D. Smith, hereby certify that on February 15th, 2007, I caused the foregoing to be electronically filed with the Clerk of the Court using CM/ECF, which will send notification of such filing(s) to the following:

John W. Shaw, Esquire
Young Conaway Stargatt & Taylor LLP

I also certify that copies were caused to be served on February 15th, 2007, upon the following in the manner indicated:

BY EMAIL AND HAND

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TAB A

Paper No.____

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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES
(Administrative Patent Judge Sally C. Medley)

MARC A. JURGOVAN and MARTIN B. DIERL
Junior Party,
(Patent No. 5,972,396 and Application No. 09/372,646),

v.

RONALD L. RAMSEY, ARTHUR MALIN, ROBERT HOGAN,
LAWRENCE SHARE and RICHMOND M. SCOTT
Senior Party,
(Application 09/481,723).

Patent Interference No. 105,173

NOTICE OF STIPULATED EXTENSION OF TIME

Pursuant to the Order Setting Times dated January 22, 2004, the parties jointly propose setting the following dates for time periods 1-6:

1.	TIME PERIOD 1 Filing preliminary motions and preliminary statement	April 9, 2004 ~~April 2, 2004~~
2.	TIME PERIOD 2 Filing Rule 633(i) and Rule 633(j) preliminary motions	May 5, 2004 ~~April 28, 2004~~
3.	TIME PERIOD 3 Filing oppositions to all preliminary motions	June 11, 2004 ~~June 4, 2004~~
4.	TIME PERIOD 4 Filing of replies	July 16, 2004 ~~July 9, 2004~~
5.	TIME PERIOD 5 Filing of request for hearing	July 30, 2004
6.	TIME PERIOD 6 Filing of Motions to Suppress and observations with respect to cross-examination taken after filing of replies	August 6, 2004

Respectfully submitted,
ROTHWELL, FIGG, ERNST & MANBECK, P.C.

Date: February 2, 2004

By _____

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Counsel for Jurgovan

Service of Preliminary Statement on each opponent who served notice under 37 CFR § 1.621(b).

Date: February 2, 2004

By _____

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JURGOVAN PRELIMINARY STATEMENT

Pursuant to 37 C.F.R. 1.621-625, party Jurgovan makes the following representations through the undersigned counsel in connection with its Preliminary Statement.

1. The invention of each of Counts 1 and 2 was made by Marc A. Jurgovan and Martin B. Dierl.

2. The invention of each of Counts 1 and 2 was made in the United States of America.

3. The date on which a first drawing was made of the invention of each of Counts 1 and 2 is January 2, 1997. A copy of a Frito-Lay laboratory notebook page containing a drawing depicting the invention of each of Counts 1 and 2 is attached as Exhibit A.

4. The date on which the first written description of the invention of each of Counts 1 and 2 was made is January 2, 1997. A copy of a Frito-Lay laboratory notebook page describing the invention of each of Counts 1 and 2 is attached as Exhibit B.

5. The date on which the invention of each of Counts 1 and 2 was first disclosed by the inventors to another person was at least by December 1996.

6. The date on which the invention of each of Counts 1 and 2 was first conceived by the inventors was at least by December, 1996.

7. The date on which the invention of Counts 1 and 2 was actually reduced to practice was at least by July 1997.

8. The date on which, after the inventors' conception of the invention of each of Counts 1 and 2, active exercise of reasonable diligence toward reducing the invention of each Counts 1 and 2 to practice began the day after conception and at least by December 1996.

DERIVATION

Party Jurgovan intends to prove derivation by an opponent from party Jurgovan. In connection with its derivation claim, party Jurgovan states the following:

1. The name of the opponent is Party Ramsey.

2. The date on which a first drawing was made of the invention of each of Counts 1 and 2 is January 2, 1997. A copy of a Frito-Lay laboratory notebook page containing a drawing depicting the invention of each of Counts 1 and 2 is attached as Exhibit A.

3. The date on which the first written description of the invention of each of Counts 1 and 2 was made is January 2, 1997. A copy of a Frito-Lay laboratory notebook page describing the invention of each of Counts 1 and 2 is attached as Exhibit B.

4. The date on which the invention of each of Counts 1 and 2 was first disclosed by the inventors to another person was at least by December 1996.

5. The date on which the invention of each of Counts 1 and 2 was first conceived by the inventors was at least by December 1996.

6. The date on which the invention of each of Counts 1 and 2 was first disclosed by the inventors to the opponent was January 2, 1997.

Respectfully submitted,

ROTHWELL, FIGG, ERNST & MANBECK, P.C.

Date: April 9, 2004

By _____

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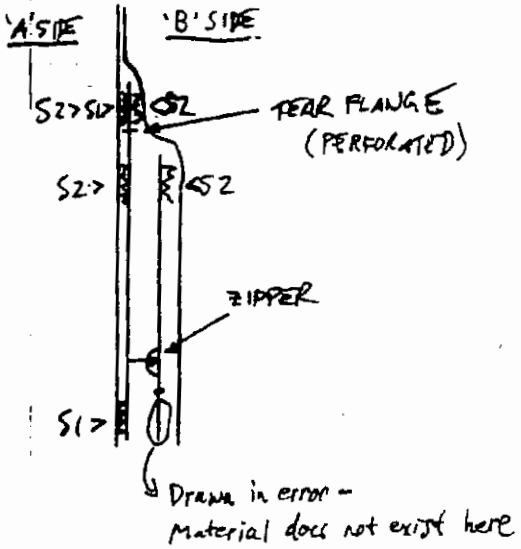
Lead Counsel for Jurgovan

EXHIBIT A

SUBJECT BAG ENCLOSURES PROJECT NO. 7578

(EXISTING) MINIGRIP



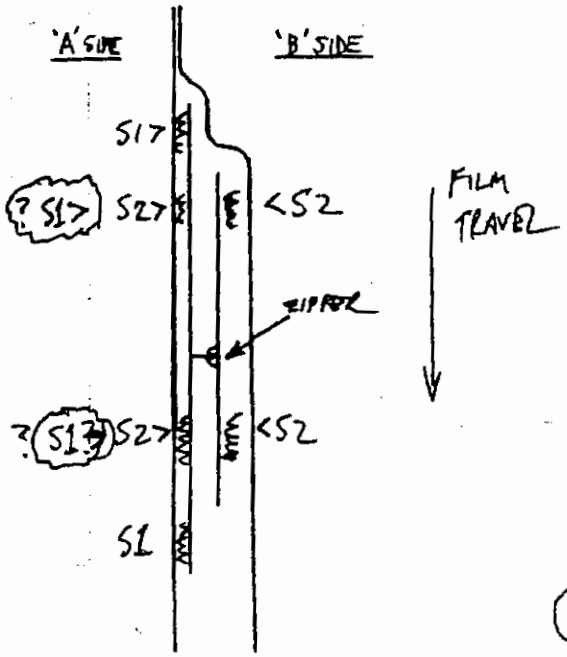
S1 – Tacks / seals to film prior to former

S2 – seals @ modified cross-seal jaws

1.5 to 2.0 lbs – for customer to open zipper

5 – 6 lbs – for internal opening force

(PROPOSED) M. JURGOVAN



S1 – Tacks / seals to film prior to former

S2 – seals @ modified cross-seal jaws

- Zipper opening force from top or bottom needs to approach sealed film opening force
- Perforated tear flange eliminated

(?? S1 ?) Does material that is tacked at S1 have to be longer than S2 (take up with Bosch)

WITNESSED

SIGNED 1/24/97

1/24/97

EXHIBIT B

DATE

SUBJECT ~~754~~ BAG RECLOSURES PROJ# 7578 1

PROJECT 7578 — BAG RECLOSURES

- DISCUSSED WITH BOB HOGAN (MINIGRIP) ON 1/2/97 AND STEVE MULDER (BOSCH) ISSUES WITH EXISTING BAG RECLOSURE PROTOTYPES.
- TEAR FEATURE DOES NOT WORK RELIABILITY & CONSISTENTLY.
- ASKED MINIGRIP TO DEVELOP A PROTOTYPE THAT ALLOWS CONSUMERS TO OPEN BAGS ~~AS~~ LIKE THEY OPEN CURRENT FLEX BAGS (USING PINCH-GRIP MOTION)
- CONCEPT ELIMINATES NEED FOR TEAR STRIPS, PEELABLE SEALS, ETC.
- CONCEPT REQUIRES REDESIGN OF MINIGRIP/BOSCH PROPOSED ZIPPER TO REDUCE ZIPPER OPENING FORCE (IF OPENED FROM UNDERSIDE OF ZIPPER.
- ZIPPER OPENING FORCE MUST APPROACH (BE LOWER THAN?) ↓ BOND STRENGTH OF SEALED FILM WHEN OPENED
- ELIMINATES CONCERNS OF PACKAGE DAMAGE AT OR AROUND END SEAL/FIN SEAL PUNCTURE

WITNESSED/UNDERSTOOD

SIGNED [signature] 1/24/97

REVISED DUE TO POOR CALIPERS INITIALLY

[signature] 1/24/97

TAB C

Paper 48

Filed by: Sally C. Medley
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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

MARC A. **JURGOVAN** and MARTIN B. DIERL
Junior Party,
(Patent 5,972,396 and Application 09/372,646),

v.

RONALD L. **RAMSEY**, ARTHUR MALIN, ROBERT HOGAN,
LAWRENCE SHARE and SCOTT M. RICHMOND
Senior Party,
(Application 09/481,723).

Patent Interference No. 105,173

ORDER SETTING TIMES

(Times for taking action--priority phase)

The preliminary motions filed in the interference have been decided (Paper 47). Accordingly, it is time to commence the priority phase of the interference. Attached to this order is the most current Trial Section Standing Order. The rules that became effective September 13, 2004[1] and the attached Standing order govern further proceedings in this interference.

[1] Fed. Reg., Vol. 69, No. 155 at 50,003 (Aug. 12, 2004).

The TIME PERIODS described below are set out in an Appendix to this ORDER. Action specified for each TIME PERIOD must be completed by the date specified for the TIME PERIOD.

The parties are authorized to stipulate different times (earlier or later, but not later than TIME PERIOD 15) for TIME PERIODS 9 through 14.[2] A notice of the stipulation must be promptly filed. The notice must be in the form of a photocopy of the Appendix attached to this ORDER with old dates crossed out and new dates inserted by hand. The parties may not stipulate an extension of TIME PERIODS 15 or 16.

1. TIME PERIOD 9

The junior party must:

a. File and serve a motion on priority and

b. Serve but not file evidence in support of the junior party priority case.

If the junior party does not file a priority motion, the junior party must arrange a conference call to the administrative patent judge so that appropriate action may be taken.

2. TIME PERIOD 10

The senior party must:

a. File and serve a motion on of priority and

b. Serve but not file evidence in support of the senior party priority case.

3. TIME PERIOD 11

a. File and serve oppositions to all priority motions and

b. Serve but do not file evidence in support of these oppositions.

4. TIME PERIOD 12

---

[2]In stipulating different times, the parties should consider the effect of the stipulation on times (1) to object to evidence (5 business days, Bd. R. 155(b)(1)), (2) to supplement evidence (10 business days, Bd. R. 155(b)(1)), (3) to begin cross-examination (no earlier than 21 days after service, SO ¶ 22.1.1) and (4) to conclude cross examination (at least 10 days before opposition or reply is due, SO ¶ 22.1.2).

a. File and serve replies to all oppositions and

b. Serve but do not file evidence in support of these replies.

5. **TIME PERIOD 13**

a. File and serve any request for oral argument on priority,

b. File and serve motions to exclude evidence (Bd. R. 155(c); SO ¶ 21.3),

c. File and serve observations on cross examination (SO ¶ 22.7) of reply testimony, and

d. File and serve a list of any issues other than priority that should be considered in rendering a final decision in the interference.[3]

6. **TIME PERIOD 14**

a. File and serve oppositions to an opponent's motion to exclude evidence and

b. File and serve any response to observations.

7. **TIME PERIOD 15**

File and serve replies to oppositions to motions to exclude evidence.

D. Deposition transcripts

Transcripts of cross examinations and depositions taken under 35 U.S.C. § 24 must be served, but not filed with the board until the exhibits are filed.

E. Serving priority exhibits

An exhibit, including an affidavit, relied upon in connection with priority must be served but not filed with the motion, opposition, reply or affidavit in which the exhibit is first mentioned.

[3]There is no need to list an issue previously resolved by a decision entered by a panel of at least three administrative patent judges inasmuch as these decisions merge with the judgment when a final decision is entered.

F. TIME PERIOD 16: Filing the priority record

1. File original set of your exhibits and one copy (or three copies if oral argument is set) of your exhibits;
2. For your priority motion, file one folder (three folders if an oral argument is set each) containing a set of motion documents consisting of:
   a. The priority motion,
   b. Any corresponding opposition,
   c. Any corresponding reply,
   d. Any corresponding observations, and
   e. Any corresponding response to the observations.
3. File any ZIP® 100 Mb disk or CD-ROM.

/s/ Sally C. Medley
Administrative Patent Judge

cc (via e-mail):

Attorney for Jurgovan:

Mr. Joseph A. Hynds

e-mail: jhynds@rothwellfigg.com

Attorney for Ramsey:

Mr. Gerald Levy
e-mail: glevy@pitneyhardin.com

Appendix--ORDER - RULE 123(a)
(Times for priority motions)

Interference 105,173

TIME PERIOD 9 . . . . . **27 December 2004**
Junior party only file priority brief and serve
(but do not file) priority evidence

TIME PERIOD 10 . . . . . **7 February 2005**
Senior party only file priority brief and serve
(but do not file) priority evidence

TIME PERIOD 11 . . . . . **21 March 2005**
File opposition to priority briefs
Serve (but do not file) opposition evidence

TIME PERIOD 12 . . . . . **2 May 2005**
File reply
Serve (but do not file) reply evidence

TIME PERIOD 13 . . . . . **13 June 2005**
Request hearing
File list of issues to be considered
File observations
File motion to exclude

TIME PERIOD 14 . . . . . **5 July 2005**
File response to observations
File opposition to motion to exclude

TIME PERIOD 15 . . . . . **19 July 2005**
File reply to opposition to motion to exclude

TIME PERIOD 16 . . . . . **26 July 2005**
File and serve exhibits
File sets of priority motions
File ZIP® disks and CD-ROMs

TAB D

Paper No.____

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Senior Party,
(Application No. 09/481,723).

Patent Interference No. 105,173

JURGOVAN MOTION FOR JUDGMENT
(based on Derivation and Priority)

STATEMENT OF PRECISE RELIEF REQUESTED

Marc A. Jurgovan and Martin B. Dierl ("Jurgovan") move, pursuant to 37 C.F.R. § 41.121, for judgment against Ronald L. Ramsey, Arthur Malin, Robert Hogan, Lawrence Share and Richmond M. Scott ("Ramsey") on the ground that Ramsey derived the inventions defined by Counts 1 and 2 in this interference from Jurgovan. Ramsey's claims 31-33, 35-39 and 41-47 are therefore unpatentable to Ramsey under 35 U.S.C. § 102(f), as Ramsey is not the true inventor of the subject matter of those claims.

Jurgovan also moves, pursuant to 37 C.F.R. § 41.121, for judgment against Ramsey on the ground that Jurgovan is entitled to priority as to Ramsey because it was the first to conceive and actually reduce to practice the inventions defined by Counts 1 and 2, and exercised reasonable diligence from prior to any conception by Ramsey to its reduction to practice. Ramsey's claims 31-33, 35-39 and 41-47 are therefore unpatentable to Ramsey under 35 U.S.C. § 102(g), as Ramsey was not the first to invent the subject matter of those claims.

LIST OF EVIDENCE IN SUPPORT OF THE MOTION

Jurgovan's list of evidence in support of this motion is attached as Appendix A.

STATEMENT OF MATERIAL FACTS SUPPORTING THE MOTION

Jurgovan's statement of material facts supporting this motion is attached as Appendix B.

FULL STATEMENT OF REASONS WHY RELIEF REQUESTED SHOULD BE GRANTED

Based on the facts and for the reasons set forth herein, judgment should be entered for Jurgovan for two separate and independent reasons. First, Ramsey's claims 31-33, 35-39 and 41-47 are unpatentable to Ramsey under 35 U.S.C. § 102(f) on grounds that Ramsey derived the

inventions defined in Counts 1 and 2 from Jurgovan and, therefore, is not the true inventor of the claimed subject matter. Second, Ramsey's claims 31-33, 35-39 and 41-47 are unpatentable to Ramsey under 35 U.S.C. § 102(g) on grounds that Jurgovan was the first to conceive and the first to actually reduce to practice the inventions defined in Counts 1 and 2, and exercised reasonable diligence from prior to any conception by Ramsey to its reduction to practice.

I. JURGOVAN IS ENTITLED TO JUDGMENT UNDER 35 U.S.C. 102(f) ON GROUNDS THAT RAMSEY DERIVED THE INVENTION FROM JURGOVAN

A. Applicable Legal Standard for Derivation

Pursuant to 35 U.S.C. § 102(f), "[a] person shall be entitled to a patent unless... he did not himself invent the subject matter sought to be patented." 35 U.S.C. § 102(f). To show derivation of invention under Section 102(f), a party must prove prior conception of the invention by another and communication of that conception to the patentee. Gambro Lundia AB v. Baxter Healthcare Corp, 110 F.3d 1573, 1576, 42 U.S.P.Q.2d 1378, 1381 (Fed. Cir. 1997). The communication of the "complete conception must be sufficient to enable one of ordinary skill in the art to construct and successfully operate the invention." Hedgewick v. Akers, 497 F.2d 905, 908, 182 U.S.P.Q. 167, 169 (C.C.P.A. 1974) (citations omitted).

Conception is the formation in the mind of an inventor of "a definite and permanent idea of the complete and operative invention, as it is hereafter to be applied in practice." Burroughs Wellcome Co. v. Barr Labs., 40 F.3d 1223, 1228, 32 U.S.P.Q.2d 1915, 1919 (Fed. Cir. 1994), cert. denied, 516 U.S. 1070 (1996) (citations omitted). The idea must be "so clearly defined in the inventor's mind that only ordinary skill would be necessary to reduce the invention to practice, without extensive research or experimentation." Id. An inventor need not know that his

invention will work to have complete conception, but only that he had the idea. Id. Conception and reduction to practice are questions of law based on subsidiary factual findings. Cooper v. Goldfarb, 154 F.3d 1321, 1327, 47 U.S.P.Q.2d 1896, 1901 (Fed. Cir. 1998).

An inventor can prove prior conception using evidence from a variety of sources to be considered by the court as a whole. Price v. Symsek, 988 F.2d 1187, 1196, 26 U.S.P.Q.2d 1031, 1037-38 (Fed. Cir. 1993). An inventor's testimony alone, however, cannot prove conception. Gambro, 110 F.3d at 1576, 42 U.S.P.Q.2d at 1381. The inventor's testimony must be accompanied by corroboration to show conception. Id. The Federal Circuit has applied a "rule of reason" analysis to determine whether the inventor's testimony has been corroborated. Price, 988 F.2d at 1196, 26 U.S.P.Q.2d at 1037. The court evaluates all evidence to determine the credibility of the inventor's conception. Id.

B. Jurgovan was the First to Conceive the Inventions Defined by Counts 1 and 2

Jurgovan had a complete conception of the invention defined by Counts 1 and 2 by no later than January 2, 1997. (JX 2020, ¶¶ 22-31; JX 2033, page 1; JX 2036, page 47). By this date, Mr. Jurgovan had conceived a reclosable package having a first portion of the zipper material attached to a front wall of Frito-Lay's standard flexible bag material (a flexible elastomeric material) and a second portion of the zipper material attached to the back wall of that material so that the zipper could be engaged just below the top seal of the bag and above the food product. (JX 2020, ¶¶ 23, 26-30; JX 2033, page 1). Mr. Jurgovan's conception further included that the top seal and the zipper material would be opened by manually gripping the front and back walls of the bag and pulling apart with a force that would open the zipper material and then the top seal of the bag from the product side outward in a single pinch-grip opening motion

without tearing or deforming the bag walls. Id. After pinch grip opening and removing food product, the consumer could reclose the package by re-engaging the zipper members. Id.

Mr. Jurgovan's conception on January 2, 1997 is corroborated by his laboratory notebook (JX 2033), his computation notebook (JX 2036), and his communication of that conception to Bob Hogan of Minigrip and Steve Mulder of Bosch by telephone on that date. (JX 2033, page 1; JX 2020, ¶¶ 26-31; JX 2036, page 47).

Mr. Jurgovan's conception was sufficiently detailed such that it could be reduced to practice without extensive research or experimentation. First, his conception met each limitation of Counts 1 and 2. (JX 2033, page 1; JX 2020, ¶¶ 22-31; JX 2021, ¶¶ 20-21). Second, it also provided additional technical detail describing how the pinch grip openable package could be constructed. Specifically, Mr. Jurgovan identified that a reduced product side opening force zipper should be used, and that the zipper opening force must approach the bond strength of the sealed film when opened. (JX 2020, ¶¶ 29-31; JX 2033, page 1; JX 2036, page 47). Mr. Jurgovan knew that with standard zipper material, such as Minigrip's, the opening force from the internal or product side was much larger than the opening force from the external or consumer side. (JX 2020, ¶¶ 29-31; JX 2021, ¶ 21; JX 2033, page 2). Mr. Jurgovan conceived the use of the reduced opening force zipper to reduce zippers stripping from the side walls and to give the consumers a consistent pinch grip opening experience. (JX 2020, ¶ 30; JX 2021, ¶¶ 15 and 17).

Mr. Jurgovan's complete conception is also evidenced by pages 1 and 2 of his laboratory notebook (JX 2033) and disclosure to Steve Callahan (his supervisor at Frito-lay) by no later than January 24, 1997. (JX 2020, ¶ 34; JX 2033, pages 1 and 2; JX 2021, ¶¶ 14-24). These laboratory notebook pages contain a description and technical drawings of Mr. Jurgovan's conception

meeting each element of the invention defined by Counts 1 and 2 in sufficient detail that a person ordinarily skilled in the art could reduce the invention to practice without undue experimentation. (JX 2020, ¶¶ 27-30 and 32-34; JX 2033, pages 1 and 2; JX 2021, ¶¶ 19-24).

Specifically, these laboratory notebook pages disclose Mr. Jurgovan's conception of applying a reduced consumer side opening force zipper to the standard Frito-Lay film (which was known to be a flexible, elastomeric film) below the top seal of the package and above where the food product would be located so that the package could be pinch grip opened by manually pulling the side walls of the bag below the zipper with a pinch grip pulling force that would disengage the zipper members and then open the top seal in a single pinch grip motion, without tearing or deforming the sidewalls of the package. This evidence further describes that the consumer could then reclose the package by manually re-engaging the zipper material after food product was removed from the package. (JX 2033, pages 1 and 2; JX 2021, ¶ 19-24; JX 2020, ¶ 27-30 and 32-34).

Mr. Callahan read, understood and signed pages 1 and 2 of Mr. Jurgovan's laboratory notebook on January 24, 1997. (JX 2021, ¶¶ 14 and 19; JX 2033, pages 1 and 2). Mr. Callahan recalls that after Mr. Jurgovan explained his invention, he remembered thinking that this could be a real breakthrough and could eliminate the problems Frito-Lay was experiencing with the Minigrip zipper design. (JX 2021, ¶ 18).

Mr. Jurgovan's complete conception is further evidenced by his disclosure of the pinch grip invention to several members of the Frito-Lay bag reclosure team, including Steve Callahan and Don Keel, on February 20, 1997. (JX 2020, ¶ 39; JX 2021, ¶¶ 30 and 31; JX 2033, pages 15-17; JX 2023, ¶¶ 7-8). Pages 15-17 of his laboratory notebook (JX 2033) contain the material

presented during this February 20, 1997 meeting and describe all elements of the invention defined by Counts 1 and 2 in sufficient detail that a person ordinarily skilled in the art could reduce the invention to practice without undue experimentation. (JX 2021, ¶¶ 30-31; JX 2033, pages 15-17; JX 2020, ¶ 39). These laboratory notebook pages were signed by Mr. Jurgovan and Mr. Callahan on February 24, 1997. (JX 2033, pages 15-17; JX 2021, ¶ 30; JX 2020, ¶ 39).

Jurgovan's evidence clearly establishes that Mr. Jurgovan had a complete conception of the inventions defined by Counts 1 and 2 by January 2, January 24, February 20 and February 24, 1997. These dates of conception are corroborated independently of Mr. Jurgovan by Mr. Callahan and Mr. Keel, and by the contemporaneous notes made in his laboratory notebook (JX 2033) and computation notebook (JX 2036).

The earliest conception date identified in Ramsey's preliminary statement is March 29, 1997. (JX 2027, pages 3 and 5). Ramsey's preliminary statement contains no evidence that it conceived anything by that date. Indeed, Ramsey represents in its preliminary statement that its first written description is September 24, 1997 and its first drawing is September 24, 1997. (JX 2027, pages 2 and 4). But even if Ramsey could establish a conception (independently from Jurgovan) by March 29, 1997 – which it cannot (see below) – it would be long after Jurgovan's complete conception. Jurgovan therefore has established that it was the first to conceive the subject matter of Counts 1 and 2.

C. Jurgovan Communicated its Complete Conception to Ramsey Prior to Any Conception by Ramsey

Jurgovan communicated its complete conception to Bob Hogan, a named inventor on the Ramsey '723 application, on January 2, 1997. (JX 2020, ¶¶ 26-31; JX 2033, page 1; JX 2036,

page 47). On this date, Mr. Jurgovan disclosed his conception of the pinch grip invention to Mr. Hogan over the telephone as a potential solution to the film tearing problem Frito-Lay was experiencing with the Minigrip zipper design. Id. Mr. Jurgovan's communication of the invention, including specific technical details such as reduced opening force zipper and zipper opening force approaching the bond strength of the sealed film when opened, was sufficiently detailed that the invention could be reduced to practice without undue experimentation. (JX 2033, page 1; JX 2020, ¶¶ 26-31; JX 2021, ¶¶ 19-24; JX 2036, page 47). Indeed, when Minigrip provided Frito-Lay with reduced opening force zipper material in September 1997, Frito-Lay reduced the invention to practice that day. (JX 2020, ¶¶ 65-67; JX 2051, page 50; JX 2022, ¶¶ 20, 21 and 23; JX 2023, ¶¶ 22, 23 and 25; JX 2052).

Jurgovan also communicated its complete conception to Bob Hogan and Art Malin, also a named inventor on the Ramsey '723 application, on January 29 and 30, 1997. (JX 2020, ¶¶ 35-36; JX 2021, ¶¶ 26-28; JX 2037). On these dates, Mr. Jurgovan disclosed his conception of the pinch grip invention to Messrs. Malin and Hogan during a meeting to discuss, inter alia, "Bag opening issues / alternate zipper prototypes" and "further zipper alternatives." (JX 2037; JX 2020 ¶ 35; JX 2021, ¶ 26). Specifically, Mr. Jurgovan disclosed during this meeting his idea of applying a reduced opening force zipper to the standard Frito-Lay film (which was known to be a flexible, elastomeric film) below the top seal of the package and above where the food product would be located so that the package could be pinch grip opened by manually pulling the side walls of the bag with a pinch grip pulling force that would disengage the zipper members and then the top seal in a single pinch grip motion, but which would not tear or deform the sidewalls of the package. He further explained that the consumer could then reclose the package

by manually re-engaging the zipper material after food product was removed from the package. (JX 2020, ¶ 36; JX 2021, ¶ 26-27).

The conception communicated by Mr. Jurgovan to Mr. Malin and Mr. Hogan at this meeting was sufficiently detailed such that a person ordinarily skilled in the art could reduce the invention to practice without undue experimentation. (JX 2021, ¶ 27). Minigrip understood Mr. Jurgovan's disclosure of his pinch grip invention, but was more interested in pursuing its current zipper system than making the modifications necessary to implement the pinch grip design disclosed by Mr. Jurgovan. (JX 2021, ¶ 28; JX 2020, ¶ 37).

That the pinch grip invention originated with Mr. Jurgovan, and not Minigrip, is further evidenced by Steve Mulder's February 27, 1997 letter in which he states that "[p]er our discussion, I would like to outline the areas of the Trans-Zip design that would have to be taken into consideration if we were to start working with the zipper profile that you have suggested to achieve a 'pinch opening bag with zipper." (Emphasis added). (JX 2033, page 22; JX 2020, ¶ 41). Mr. Mulder was a participant in many communications between Frito-Lay and Minigrip regarding the reclosable bag project. (JX 2033, page 1; JX 2020, ¶¶ 27 and 35; JX 2038; JX 2037; JX 2042).

Jurgovan also communicated its complete conception to Art Malin and Bob Hogan on March 10, 1997. (JX 2038; JX 2020, ¶¶ 42-45; JX 2021, ¶¶ 33-36; JX 2022, ¶ 9; JX 2023, ¶ 10). On this date, Mr. Jurgovan sent Messrs. Malin and Hogan a memorandum which disclosed his conception of the pinch grip invention. (JX 2038; JX 2020, ¶ 42; JX 2021, ¶¶ 32-35; JX 2022, ¶¶ 9, 10; JX 2023, ¶¶ 10, 11). This memorandum communicates each of the elements of Counts 1 and 2 in sufficient detail such that the pinch grip invention could be reduced to practice without

undue experimentation. (JX 2021, ¶¶ 34-35). Indeed, as stated above, Frito-Lay reduced the invention to practice within a day of receiving the reduced opening force zipper from Minigrip. (JX 2020, ¶¶ 65-67; JX 2051, page 50; JX 2022, ¶¶ 20, 21 and 23; JX 2023, ¶¶ 22, 23 and 25; JX 2052). Mr. Jurgovan's March 10, 1997 memorandum is further evidence that Minigrip understood his pinch grip invention and had expressed several concerns about it. (JX 2038; JX 2021, ¶¶ 35-36; JX 2020, ¶ 44). Minigrip always preferred to pursue a solution that involved their peelable seal design rather than Jurgovan's pinch-grip design. (JX 2021, ¶ 36).

Lastly, a March 14, 1997 handout prepared by Mr. Malin provides additional evidence that Jurgovan communicated its complete conception to Minigrip. (JX 2040; JX 2020, ¶¶ 47-48). On page 2 of this handout, under the heading of "pinch-grip opening concepts," Mr. Malin provides a sketch of Mr. Jurgovan's pinch grip openable package that he had described to Mr. Malin and Mr. Hogan, and identifies it as coming from "Frito-Lay." Id.

Jurgovan provides substantial evidence that it communicated its complete conception to Messrs. Malin and Hogan prior to March 29, 1997, the earliest conception date identified in Ramsey's preliminary statement. (JX 2027, pages 3 and 5). Ramsey is not the true inventor of the subject matter of Counts 1 and 2, and claims 31-33, 35-39 and 41-47 of the '723 application therefore are invalid under 35 U.S.C. § 102(f).

II. JURGOVAN IS ENTITLED TO JUDGMENT UNDER 35 U.S.C. 102(g) FOR THE ADDITIONAL, INDEPENDENT REASON THAT IT ACTUALLY REDUCED THE INVENTIONS TO PRACTICE PRIOR TO RAMSEY

A. Applicable Legal Standard

In an interference, priority is awarded to the party who can prove that it was the first to reduce the subject matter of the count to practice, or the first to conceive coupled with reasonable

diligence in reducing the invention to practice. 35 U.S.C. § 102(g); Mahurkar v. C.R. Bard, Inc., 79 F.3d 1572, 1577; 38 U.S.P.Q.2d 1288, 1290 (Fed. Cir. 1996), cert. denied, 524 U.S. 1106 (1999). A junior party seeking a determination of priority must demonstrate by a preponderance of evidence its prior reduction to practice or prior conception coupled with reasonable diligence. Singh v. Brake, 317 F.3d 1334, 1340, 65 U.S.P.Q.2d 1641, 1645 (Fed. Cir. 2003).

In order for there to be a reduction to practice, an embodiment of the invention meeting every limitation of the interference count must be shown to have performed as intended. Newkirk v. Lulejian, 825 F.2d 1581, 1582, 3 U.S.P.Q.2d 1793, 1794 (Fed. Cir. 1987); Mahurkar, 79 F.3d at 1578. The testing of such an embodiment "need not show utility beyond a possibility of failure, but only utility beyond a probability of failure." Scott v. Finney, 34 F.3d 1058, 1062, 32 U.S.P.Q.2d 1115, 1118 (Fed. Cir. 1994) (emphasis added). "[T]here is certainly no requirement that an invention, when tested, be in a commercially satisfactory stage of development in order to reduce the invention to practice ." DSL Dynamic Sciences, Ltd. v. Union Switch & Signal, Inc., 928 F.2d 1122, 1126, 18 U.S.P.Q.2d 1152, 1155 (Fed. Cir. 1991).

B. Jurgovan Was the First to Reduce to Practice the Inventions Defined by Counts 1 and 2

For reasons stated above, Ramsey derived the inventions of Counts 1 and 2 from Jurgovan and, therefore, cannot establish a reduction to practice independently from Jurgovan. Further, any reduction to practice by Ramsey would inure to Jurgovan's benefit. Cooper, 154 F.3d at 1331-32. But even if Ramsey could make such a showing, Jurgovan was the first to reduce to practice the inventions defined by Counts 1 and 2.

During the course of development of the pinch-grip openable package, prior to Jurgovan's filing date of May 15, 1998, Jurgovan manufactured and successfully pinch-grip opened and reclosed complete packages containing food product on or by at least six occasions: September 25, September 30, November 6, and December 18, 1997 and March 19 and 20, 1998.

Jurgovan first reduced the invention of Counts 1 and 2 to practice by at least September 25, 1997. (JX 2020, ¶¶ 65-67; JX 2022, ¶¶ 20-23; JX 2023, ¶¶ 22-25). By that date, Mr. Jurgovan and Mr. Reaves manufactured 41 pinch-grip openable packages falling within the scope of Count 1 and tested them in a manner that falls within the scope of Count 2 so as to demonstrate that the packages and the method of opening them would each work for its intended purpose. Id. Specifically, of the 41 packages that Mr. Jurgovan and Mr. Reaves manufactured and tested, they successfully pinch-grip opened and then reclosed 30 of those packages. (JX 2051, page 50, JX 2020; ¶ 67; JX 2022, ¶ 23; JX 2023, ¶ 25; JX 2057, page 4; JX 2020, ¶ 88). This represented a success rate of nearly 70%. Mr. Jurgovan and Mr. Reaves recognized that these results, while not satisfactory for commercial release, demonstrated that the pinch-grip openable package worked for its intended purpose, and, accordingly, these tests constitute a reduction to practice of the inventions of the counts. (JX 2020, ¶ 67; JX 2022, ¶ 23; JX 2023, ¶ 25). "Reduction to Practice does not require that the invention, when tested, be in a commercially satisfactory stage of development." Scott, 34 F.3d at 1061 (citations and internal quotations omitted). This manufacture and testing of the pinch-grip openable packages is corroborated by Mr. Reaves, Mr. Keel, and other documentary evidence. (JX 2022, ¶¶ 20-23; JX 2023, ¶¶ 22-25).

Jurgovan again reduced the inventions of Counts 1 and 2 to practice by at least September 30, 1997. (JX 2022, ¶¶ 25-26; JX 2023, ¶¶ 27-29; JX 2051, page 51). By that date, Mr. Jurgovan and Mr. Reaves had manufactured an additional 130 pinch-grip openable packages falling within the scope of Count 1. These packages were tested by a number of Frito-Lay employees in a manner that falls within the scope of Count 2 so as to demonstrate that the packages and the method of opening them would each work for its intended purpose. (JX 2022, ¶¶ 25-26; JX 2023, ¶¶ 27-29), Specifically, of approximately 130 packages manufactured and tested, they successfully pinch-grip opened and then reclosed approximately half of those packages, again demonstrating that the pinch-grip closable package would work for its intended purpose. (JX 2051, page 51; JX 2022, ¶ 25; JX 2023, ¶ 28). This manufacture and testing of the pinch-grip openable packages is corroborated by Mr. Reaves, Mr. Keel and other documentary evidence. (JX 2022, ¶¶ 25-26; JX 2023, ¶¶ 27-29; JX 2051, page 51).

Jurgovan again reduced the inventions of Counts 1 and 2 to practice on November 6, 1997. (JX 2020, ¶¶ 77-79; JX 2022, ¶¶ 31-35). On that date, Mr. Jurgovan and Mr. Reaves manufactured an additional approximately 150 pinch-grip openable packages falling within the scope of Count 1 and tested them in a manner that falls within the scope of Count 2 so as to demonstrate that the packages and the method of opening them would each work for its intended purpose. (JX 2020, ¶¶ 77-78; JX 2022, ¶¶ 31-32, 34). Specifically, of approximately 150 packages Mr. Jurgovan and Mr. Reaves manufactured and tested, they successfully pinch-grip opened and then reclosed approximately all but 7 or 8 of those packages. (JX 2051, page 70; JX 2033, page 46; JX 2020, ¶ 79; JX 2022, ¶¶ 32 and 35). Indeed, in only 7 or 8 of those approximately 150 packages did they experience striping of the zipper or significant mooning.

Id. This manufacture and testing of the pinch-grip openable packages is corroborated by Mr. Reaves, Mr. Keel and other documentary evidence. (JX 2022, ¶¶ 31-34; JX 2023, ¶¶ 33-37; JX 2033, page 46; JX 2051, page 70).

Jurgovan again reduced the inventions of Counts 1 and 2 to practice by December 18, 1997. (JX 2020, ¶¶ 82-86; JX 2024, ¶¶ 9-14). The packages tested during the December 9 to 18, 1997 time period were "peel-seal" packages, intended to be opened by tearing the top seal off the package and then pulling the top portions of the bag walls apart to open a peel seal – located above the zipper and below the tear seal – and then the zipper. (JX 2020, ¶ 82; JX 2024, ¶¶ 5 and 9). Consumer research suggested that many consumers would ignore the opening instructions and improperly attempt to open such packages in a pinch-grip manner (i.e, pinching and pulling apart the bag wall below the zipper members), possibly causing the zipper to fail such that the package could not thereafter be reclosed with the zipper. (JX 2052; JX 2020, ¶ 70; JX 2024, ¶ 7). To reduce the likelihood of zipper failures caused by improper opening, Jurgovan incorporated a modified, reduced internal opening force zipper into the peel-seal packages. (JX 2053; JX 2020, ¶ 71; JX 2024, ¶ 8). Jurgovan made approximately 72 such "peel-seal" packages and successfully (albeit improperly) pinch-grip opened all but approximately 7 them. (JX 2051, page 97; JX 2056; JX 2020, ¶¶ 82-83; JX 2024, ¶¶ 10-11). This approximately 90% success rate again confirmed that the invention worked for its intended purpose. Id. This manufacture and successful testing of the pinch-grip openable package is corroborated by Mr. Edwards and other documentary evidence. (JX 2024, ¶¶ 9-13; JX 2056; JX 2051, page 97).

Jurgovan again reduced the inventions of Counts 1 and 2 to practice on March 19 and 20, 1998. (JX 2033, pages 68-73; JX 2020, ¶¶ 92-93 and 96-97; JX 2022, ¶¶ 38-42; JX 2023, ¶¶ 40-

44). On those dates, Mr. Jurgovan and Mr. Reaves manufactured additional packages falling within the scope of Count 1 and tested them in a manner that falls within the scope of Count 2 so as to demonstrate that the packages and the method of opening them would each work for its intended purpose. (JX 2033, page 72-73; JX 2020, ¶ 96; JX 2022, ¶ 41; JX 2023, ¶ 43). Mr. Jurgovan and Mr. Reaves manufactured and pinch-grip tested over 100 packages and had no pinch-grip failures. Id. The manufacture and successful testing of the pinch-grip packages is corroborated by Mr. Reaves, Mr. Keel, and other documentary evidence. (JX 2033, pages 68-75; JX 2022, ¶¶ 38-42; JX 2023, ¶¶ 40-44).

The pinch-grip openable packages successfully tested on or by September 25, September 30, November 6, and December 18, 1997 and March 19 and 20, 1998 were flexible and included front and rear elastomeric walls sealed together at a top seal and first and second zipper elements attached to the front and rear walls, respectively, and having respective first and second engagement members. (JX 2020, ¶ 65, 77; JX 2022, ¶¶ 21, 26, 34, 42; JX 2023, ¶¶ 23, 29, 37, 44; JX 2024, ¶ 14). The first and second engagement members were engaged together, and the top seal and the engagement members were manually pinch-grip openable under a pinch-grip pulling force applied to the front and rear walls below the engagement members. Id. The front and rear walls were made of a material having sufficient strength to resist tearing and deformation during pinch-grip opening. Many of the pinch-grip openable packages contained food product which, on occasion, was removed from the packages. (JX 2022, ¶¶ 21, 26, 34, 42; JX 2023, ¶¶ 23, 29, 37, 44; JX 2024, ¶ 14). The packages were reclosed by manually re-engaging the zipper engagement members. (JX 2023, ¶¶ 22, 26; JX 2023, ¶¶ 24, 29; JX 2024, ¶ 10).

Thus, on or by September 25, September 30, November 6, and December 18, 1997 and March 19 and 20, 1998 Jurgovan made packages including all the limitations of Count 1 and opened them in a manner that includes all the limitations of Count 2. Moreover, he appreciated from the results of evaluation tests performed on the packages that they would work for their intended purpose. These reductions to practice were corroborated by Messrs. Reaves, Keel and Edwards, as well as other documentary evidence. Accordingly, Jurgovan reduced the inventions of Count 1 and Count 2 to practice by at least September 25, 1997 and again on or by September 30, November 6, and December 18, 1997 and March 19 and 20, 1998. The September, November and December 1997 reduction to practice dates are before Ramsey's March 6, 1998 filing date of the '723 application.

III. JURGOVAN IS ENTITLED TO JUDGMENT UNDER 35 U.S.C. 102(g) ON GROUNDS THAT IT FIRST CONCEIVED THE INVENTIONS AND EXERCISED DILIGENCE FROM BEFORE ANY CONCEPTION BY RAMSEY TO ITS REDUCTION TO PRACTICE

A. Applicable Legal Standard

As noted above, a party is entitled to an award of priority if it was the first to conceive coupled with reasonable diligence in reducing the invention to practice. 35 U.S.C. § 102(g); Mahurkar, 79 F.3d at 1577; 38 U.S.P.Q.2d at 1290. Diligence is activity toward reduction to practice such that the invention's conception and reduction to practice are "substantially one continuous act." Id. Diligence must be considered in light of all the circumstances; the analysis turns on whether the inventor was pursuing his goal in a reasonably continuous fashion. Monsanto Co. v. Mycogen Plant Sci., Inc., 61 F. Supp. 2d 133, 180 (D. Del. 1999).

In order to prove diligence, an inventor must account for the entire critical period by demonstrating activity aimed at reducing to practice and give legally acceptable excuses for any gaps in that activity. Griffith v. Kanamaru, 816 F.2d 624, 626, 2 U.S.P.Q.2d 1361, 1362 (Fed. Cir. 1987). Proof of reasonable diligence does not require a party to drop all other projects or to work constantly on the invention. Mycogen Plant Sci., Inc. v. Monsanto Co., 252 F.3d 1306, 1316, 58 U.S.P.Q.2d 1891, 1899 (Fed. Cir. 2001), vacated on other grounds, 535 U.S. 1109 (2002). The work attributed to reducing the invention to practice must ordinarily be directly related to reduction to practice of the invention. Naber v. Cricchi, 567 F.2d 382, 384, 196 U.S.P.Q.2d 294, 296 (C.C.P.A. 1977), cert. denied., 439 U.S. 826 (1978).

B. Jurgovan Conceived First and Was Reasonably Diligent

For reasons stated above, Ramsey derived the inventions of Counts 1 and 2 from Jurgovan and, therefore, cannot establish a reduction to practice independent of Jurgovan. But even if it could, and even if Ramsey could establish the September 23, 1997 reduction to practice date identified in its preliminary statement, priority should be awarded to Jurgovan because it was the first to conceive and was diligent toward its reduction to practice.

As shown above, Jurgovan conceived the invention of the counts by no later than January 2, 1997 (JX 2020, ¶¶ 22-31; JX 2033, page 1; JX 2036, pages 1 and 47), and had a first actual reduction to practice no later than September 25, 1997. (JX 2020, ¶¶ 26 and 65-67; JX 2022, ¶¶ 20-21 and 23-24; JX 2023, ¶¶ 22-23 and 25-26; JX 2051, page 50; JX 2052). Because Ramsey's Preliminary Statement alleges a conception date of March 29, 1997 and a reduction to practice of September 23, 1997 (JX 2027, pages 3 and 5), the critical period for Jurgovan's reasonable diligence runs from just prior to March 29, 1997 (assuming Ramsey can establish an

independent conception by that date) until Jurgovan's first actual reduction to practice of September 25, 1997.

Jurgovan diligently pursued a reduction to practice from prior to March 29, 1997. By that date, Mr. Jurgovan had conceived the invention of the counts, and communicated that conception to Ramsey at least on January 2, 1997, January 29 and 30, 1997, and March 10, 1997. (JX 2020 ¶¶ 26-36 and 42-45; JX 2033, pages 1-2; JX 2036, page 47; JX 2037; JX 2038; JX 2021, ¶¶ 14-23, 25-27 and 32-35). During the critical period, Mr. Jurgovan continuously worked on trying to reduce to practice his pinch-grip opening design.[1]

For example, on March 10, 1997, he described his pinch-grip method as "preferred" to others at Frito-Lay, as well as to Bosch and Minigrip (JX 2020, ¶¶ 42-43; JX 2038), and requested Minigrip to provide to him a zipper capable of pinch-grip opening. (JX 2020, ¶ 44; JX 2038; JX 2021, ¶¶ 32-35). On March 26, 1997, Mr. Jurgovan prepared and distributed a schedule for implementation of the bag reclosure program. (JX 2020, ¶ 50; JX 2042). On April 11, 1997, Mr. Jurgovan reported that during Period 4 (March 23 to April 19; JX 2036 inside front cover), he was evaluating a premium 3-ply structure which would allow the consumer to open the package without tearing the package or damaging the zipper. (JX 2020, ¶ 51; JX 2043, page 2). On May 9, 1997, Mr. Jurgovan reported that during Period 5 (April 20 to May 17; JX 2036 inside front cover), he was continuing to evaluate test films (JX 2020, ¶ 52; JX 2044). On May 13, 1997, Mr. Jurgovan met with Minigrip to discuss progress on the bag reclosure project. They also discussed development of the pinch grip concept, and scheduled an initial evaluation for

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[1] As required by the Miscellaneous Order of January 21, 2005, Jurgovan's Diligence Chart is attached to his Motion as Appendix C.

mid/late June 1997. (JX 2020, ¶ 53; JX 2045). On May 23, 1997, Mr. Jurgovan reported to Minigrip testing of peelable zipper seal film samples, and requested delivery of pinch grip test materials by June 20, 1997. (JX 2020, ¶ 54; JX 2046).

On June 4, 1997, Mr. Jurgovan reported that during Period 6 (May 18 to June 14; JX 2036 inside front cover), he completed initial testing of the peelable bag seal with Minigrip test zipper film with positive results. (JX 2020, ¶ 55; JX 2047). On June 27, 1997, Mr. Jurgovan reported that during Period 7 (June 15 to July 12; JX 2036 inside front cover), decisions were made regarding test marketing of product in recloseable bags. (JX 2020, ¶ 56; JX 2048). On July 30, 1997, Mr. Jurgovan reported that during Period 8 (July 13 to August 9; JX 2036 inside front cover), he continued efforts to optimize the packaging film, zipper materials and jaw design with respect to the bag reclosure project, and that evaluation of a new Minigrip zipper was run the week of July 21. (JX 2020, ¶ 57; JX 2049). On August 28, 1997, Mr. Jurgovan reported that during Period 9 (August 10 to September 6; JX 2036 inside front cover), a new metallized lamination eliminated the tear potential in the previous material. (JX 2020, ¶ 58; JX 2050).

At that point, Mr. Jurgovan realized that he had a short-term solution, but also knew that a long-term solution would require the use of Frito-Lay's standard film material. (JX 2020, ¶ 59). Therefore, during the weeks of August 25 and September 1, 1997, he and Mr. Dierl continued to press for implementation of the pinch grip concept. (JX 2020, ¶¶ 59-62; JX 2033, pages 31-34). On September 2 and 18, 1997, he again requested that Minigrip provide a zipper suitable for pinch grip opening. (JX 2020, ¶ 63-64; JX 2033, page 31 and 35-37; JX 2051, page 41). The zippers were received by September 25, 1997, and were successfully incorporated into

bags by that date (JX 2020,¶¶ 65-68; JX 2051, page 50; JX 2052), constituting Jurgovan's first actual reduction to practice.

Based on the foregoing, Jurgovan is entitled to judgment based on an earlier conception, and diligence to its first actual reduction to practice. Jurgovan, however, did not stop there, and continued actively to pursue the invention within the counts well beyond the necessary period.

Jurgovan continued to engage in testing to refine the invention. For example, by October 20, 1997 it was decided to use a zipper capable of pinch grip opening in the reclosure test market. (JX 2020, ¶ 72; JX 2053). On October 15 and November 5, 1997, Mr. Jurgovan consulted an attorney regarding patent issues raised by the pinch grip invention. (JX 2020, ¶¶ 74-75; JX 2051, pages 59-60 and 69). On November 6, 1997, Mr. Jurgovan received additional reduced force zipper material from Minigrip and again successfully made prototype pinch grip openable bags with that material (JX 2020 ¶¶ 76-79; JX 2054; JX 2051, page 70; JX 2033, page 46; JX 2022, ¶¶ 31-35; JX 2023, ¶¶ 33-37), which constituted another actual reduction to practice.

Work on the project continued. Additional pinch grip openable bags were made and successfully tested during the period of December 9-18, 1997 (JX 2020, ¶¶ 82-87; JX 2051, pages 97 and 112; JX 2056; JX 2033, page 49; JX 2024, ¶¶ 9-14), constituting yet another actual reduction to practice. On January 26, 1998, Mr. Jurgovan met with Minigrip, at which optimization of the pinch grip zipper and its application to the bag wall were discussed. (JX 2020, ¶¶ 88-89; JX 2033, page 56). On March 4, 1998, Frito-Lay conducted additional tests in connection with the sealing of the profile portion of the zipper mechanism to the bag walls. Those tests caused Frito-Lay to modify its equipment. (JX 2020, ¶ 91; JX 2033, page 62). Between March 6 and 20, 1998 Frito-Lay conducted a number of tests on its retrofitted bag

making equipment, and also on a revised zipper design (JX 2020, ¶¶ 92-97; JX 2033, pages 64-66 and 69-73; JX 2059; JX 2022, ¶¶ 38-42; JX 2023, ¶¶ 40-44), constituting yet another actual reduction to practice. On April 9, 1998, Mr. Jurgovan reported that proof of principle testing of the pinch grip application and bag design was successfully accomplished during Period 4 (April 29 to May 25, 1998; JX 2051, inside front cover), and that work continues on optimizing zipper thickness, seal and location, and zipper application robustness. (JX 2020, ¶ 98; JX 2061).

While Jurgovan was actively working on the technical aspects of the pinch grip invention, Frito-Lay was concurrently taking steps on the legal front to prepare and file a patent application directed to the invention within the counts. In November 1997, Thomas Schur, Frito-Lay's in-house counsel, asked Rothwell, Figg, Ernst & Kurz ("RFEK") to review the invention and conduct a patentability search. (JX 2026, ¶ 5; JX 2072). RFEK reported those results to Mr. Schur on January 5, 1998. (JX 2026, ¶ 6; JX 2073). Shortly thereafter, Mr. Schur asked RFEK to prepare the patent application. (JX 2026, ¶ 6). The application was drafted by Stephen Parker of RFEK from February 27, 1998 until May 14, 1998, during which time several drafts were created and revised. (JX 2025, ¶¶ 3-10; JX 2026, ¶¶ 7-8; JX 2064-2069). The application was filed on May 15, 1998.

Lastly, Ramsey's activities directed to making zipper material at Mr. Jurgovan's request for the pinch-grip invention inure to Jurgovan's benefit for purposes of establishing Jurgovan's diligence. Cooper, 154 F.3d at 1331-32.

The foregoing establishes that Jurgovan was reasonably diligent throughout the critical period, and indeed well beyond. Jurgovan was reasonably diligent to several actual reductions to practice, and to its May 15, 1998 filing date, showing that Jurgovan did not abandon, suppress or

conceal the invention after its initial actual reduction to practice on September 25, 1997. Jurgovan is entitled to judgment on that basis as well.

IV. CONCLUSION

For the foregoing reasons, judgment should be entered for Jurgovan on grounds that (1) Ramsey derived the inventions set forth in Counts 1 and 2 from Jurgovan and, therefore, is not the inventor of the claimed subject matter, and (2) Jurgovan was the first to conceive and the first to actually reduce to practice the inventions set forth in Counts 1 and 2, and exercised reasonable diligence from prior to any conception by Ramsey to its reduction to practice.

Respectfully submitted,
ROTHWELL, FIGG, ERNST & MANBECK, P.C.

Date: January 21, 2005

By _____

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CERTIFICATE OF FILING

The undersigned hereby certifies that a true and correct copy of the foregoing **JURGOVAN MOTION FOR JUDGMENT** was filed this 21st day of January, 2005, via electronic filing, with the following:

The Board of Patent Appeals and Interferences
United States Patent and Trademark Office
Crystal Gateway 2
10th Floor
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Facsimile: 703-305-0942

Erik van Leeuwen

CERTIFICATE OF SERVICE

The undersigned hereby certifies that a true and correct copy of the foregoing **JURGOVAN MOTION FOR JUDGMENT** was served on this 21st day of January, 2005, via electronic filing, on the following counsel for Party Ramsey:

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TAB E

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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES
(Administrative Patent Judge Sally C. Medley)

MARC A. JURGOVAN and MARTIN B. DIERL
Junior Party,
(Patent No. 5,972,396 and Application No. 09/372,646),

v.

RONALD L. RAMSEY, ARTHUR MALIN, ROBERT HOGAN,
LAWRENCE SHARE and RICHMOND M. SCOTT
Senior Party,
(Application No. 09/481,723).

Patent Interference No. 105,173

DECLARATION OF MARC A. JURGOVAN

Jurgovan EXHIBIT 2020
Jurgovan v. Ramsey
Interference No. 105,173

I, MARC A. JURGOVAN, hereby declare and state as follows:

I. Background and Experience

1. I am a named inventor of U.S. patent 5,972,396 ("the '396 patent") (JX 2001) and Application Serial No. 09/372,646 ("the '646 application") (JX 2002) involved in this interference proceeding. I was employed by Frito-Lay, Inc. ("Frito-Lay") from August 1988 to May 1998 as a packaging / project engineer with responsibilities in many different facets of package and equipment development, testing and implementation. Frito-Lay is a subsidiary of Recot, Inc., the assignee of the '396 patent and the '646 application. From June 1998 to January 2004, I worked for Tropicana Products, Inc. as a packaging / project engineer and am currently self employed as a consultant to the packaging industry.

2. I was awarded a Bachelor of Science Degree in Mechanical Engineering from the University of Illinois, Urbana-Champaign, in 1988. I have over 15 years of experience in the exploration and adaptation of new technologies and designing, developing and implementing packaging systems in the food and beverage industry.

3. One of my responsibilities at Frito-Lay was the development of a reclosable flexible package for certain of Frito-Lay's salty snack food products. One of the reclosable flexible packages that I conceived and developed was a flexible package that could be pinch-grip opened by the consumer and then reclosed with the zipper located beneath the top seal of the package, as described in the '396 patent and the '646 application.

4. I am giving this declaration, which I understand will be filed in this interference proceeding, to describe the development of my (and my co-inventor's) inventions described in the '396 patent and the '646 application, and my disclosure of those inventions to various people

at Minigrip/Zip-Pak ("Minigrip"). All of the work documented here took place in the United States.

II. Development of the Pinch-Grip Openable and Reclosable Bag Invention Described in the '396 Patent and the '646 Application

5. Frito-Lay is a world-wide leader in the development, manufacture and marketing of consumer snack food products. Frito-Lay's product line includes the famous salty snack food products Lays® brand potato chips, Doritos® and Tostitos® brand corn chips, among others.

6. Frito-Lay wanted to market a flexible, reclosable package for certain of its salty snack food products in which the consumers could open and then reclose to better preserve the freshness of any food product remaining in the package. A reclosure project was initiated at Frito-Lay in 1996 to develop a reclosable package solution for its salty snack food products.

7. I joined the reclosure project in October 1996. At that time, an approach being pursued was to attach reclosable zipper material to the standard, flexible film being used for Frito-Lay's salty snack food products. Using the standard Frito-Lay packaging film in the reclosable package solution was very important because it would avoid significant costs associated with the purchase of more expensive film and changing certain aspects of the manufacturing process. Given the large volume of product produced by Frito-Lay, these additional costs associated with changing the standard film would have been prohibitive.

8. Because Frito-Lay would be manufacturing the reclosable packages in its manufacturing facilities, Frito-Lay needed a supplier of zipper material as well as equipment to apply the zipper material to the flexible film in its bag making equipment. By the time I joined the reclosure project in October 1996, Frito-Lay had already contacted Minigrip to be a potential

supplier of zipper material and the Robert Bosch Corporation ("Bosch") as a potential supplier of machinery to apply the zipper material to the flexible film.

9. As part of my responsibilities on the reclosure project, I routinely and regularly communicated with employees at Bosch and Minigrip, orally and in writing, regarding the zipper material and the application equipment that we would need to develop and manufacture the reclosable package at Frito-Lay.

10. I prepared and sent a memorandum to Steve Mulder of Bosch, dated November 4, 1996, entitled "Bosch Zipper Application Testing," in connection with my responsibilities on the Frito-Lay reclosure project. A copy of that memorandum is attached as JX 2031. In that memorandum, I explained Frito-Lay's interest in testing the Bosch zipper application system using Minigrip's zipper material with Frito-Lay's salty snack packaging. This application system was used to apply zipper material across the top of the film material, transverse to the direction of film travel, in a vertical form, fill and seal ("VFFS") bag making equipment. I explained that Frito-Lay was willing to initially test the application system on a Bosch VFFS bagmaker, but was most interested in development of a retrofit kit for the existing Frito-Lay VFFS bagmaking equipment. It would have been prohibitively expensive to replace Frito-Lay's existing fleet of bag making equipment to accommodate the reclosable package.

11. I also prepared and sent a memorandum to Steve Mulder of Bosch and Bob Hogan of Minigrip, dated November 27, 1996, entitled "Bag Reclosure Status," in connection with my responsibilities on the Frito-Lay reclosure project. A copy of that memorandum is attached as JX 2032. In this memorandum, I discussed, among other things, Frito-Lay's excitement about the bag reclosure project and that Frito-Lay is scheduled to perform consumer research testing on the weekends of December 7 and 14, 1996, to address consumer packaging

purchase habits in the marketplace. I stated that the request to Bosch for the extremely quick turnaround for the samples reflects the need to have the product at the various test sites prior to December 6, 1996. I also expressed the need for Frito-Lay to acquire a bagmaker from Bosch so that Frito-Lay could conduct testing bag reclosure solutions in its packaging lab.

12. The samples referred to in my November 27, 1996 memorandum were a prototype reclosable flexible bag design proposed by Minigrip that was similar to a standard flexible bag / zipper reclosure design that was supplied to other customers by Bosch and Minigrip and used commercially. However, this standard bag / zipper reclosure design was being applied to the Frito-Lay salty snack food standard film.

13. In late December 1996, I opened a Frito-Lay laboratory notebook to record my work in connection with the reclosure project. A copy of this laboratory notebook is attached as JX 2033. The cover of the laboratory notebook indicates that it is Technology Notebook No. 3558, User's Name is Marc Jurgovan, and reflects that it was used from December 30, 1996 to April 16, 1998. The entirety of this notebook reflects my work on the reclosure project.

14. A diagram of this initial Bosch/Minigrip prototype is shown on page 2 of my laboratory notebook (JX 2033) as the "(Existing) Minigrip" design. As shown in this diagram, this reclosure bag design consisted of a zipper seal to the front and rear film panels with primary seals "S2". A tear strip was created by sealing the film to the upper perforated zipper flange. In use, the consumer would tear away the tear strip (film and perforated zipper flange material) in the transverse direction across the top of the package along a perforation in the package material. The consumer would then separate the zipper material thereby opening the package, allowing access to the salty snack food product contained in the bag. The consumer could then reclose the package by manually re-engaging the zipper material.

15. This prototype reclosable package was similar to other commercially available reclosable packages in that it was opened by the consumer from the top of the package, above the zipper. The consumer would gain access to the package's contents by tearing in the transverse direction a tear strip, and then opening the primary peel-seal and then opening a zipper mechanism. With this construction, the package is opened from the "consumer" side.

16. We experienced significant problems with implementing this design and other proposed Minigrip designs used with standard Frito-Lay commercial film structures. In particular, when we tried to open the package by first tearing off the tear strip material along the perforation, the tearing would continue randomly and would not follow the perforation. The tearing would travel upwards toward the top of the bag or downward into the zipper material or fin seal area of the bag. Also, when we attempted to open the primary seal (located above the zipper material), the inner laminar bonds of the Frito-Lay film would often fail causing further uncontrolled tearing down and into the package. This uncontrolled tearing of the flexible film material during package opening was unacceptable and did not permit the desired reclosure of the package. In my view, the tearing motion across the top of the package required to open the package using the standard Bosch/Minigrip reclosure structure did not work well with the design of the standard Frito-Lay film material used in its salty snack food products.

17. On December 5, 1996, I wrote and sent a memo to Joel Berry and Steve Callahan of Frito-Lay entitled "Bag Reclosure Update" in connection with my work on the bag reclosure project. A copy of that memo is attached as JX 2034. Steve Callahan and Joel Berry were managers within the packaging R&D organization at Frito-Lay. This memo identifies several issues to be resolved in connection with the "Bosch/Minigrip" zipper prototype described above.

In particular, I mention on page 2 of the memo that we need to resolve the issue of opening the package consistently without tearing the film and its impact on the fin seal area of the package.

18. On December 31, 1996, I wrote and sent another memo to Joel Berry and Steve Callahan entitled "Period 13 Status Report" which describes the status of the bag reclosure project during that time period. (Frito-Lay breaks up the calendar year into 13 four-week time periods). A copy of that memo is attached as JX 2035. This memo identifies again that "[w]ith zipper reclosure, issues exist with the ability to open the bag after the zipper is applied without tearing the film / finished package."

19. There was significant interest at Frito-Lay during this time period to come up with a viable, commercially acceptable reclosable package for the salty snack food products. It became clear to me, however, that we were headed in the wrong direction with the Bosch/Minigrip prototype as applied to the standard Frito-Lay film material.

20. In connection with my work on this project, I learned about how the Frito-Lay film material was engineered, and how the salty snack food products were designed to open during the normal pinch-grip opening process. In particular, a typical clear or metallized standard Frito-Lay snack film is a multi-laminate structure consisting of a slip film outer layer bonded to a clear or metallized barrier film layer bonded to an inner sealant layer. I learned that this film was engineered so that when consumers opened packages using the standard pinch-grip motion, the interlaminar bonds near the top seal of the package would delaminate in an upward direction away from the food product. This design provided a consistent bag opening force to consumers independent of the film-to-film seal that occurred during the VFFS bag making operation. The pinch-grip motion is where the consumer manually pulls the side walls of the package in an outward direction to open the top seal up and away from the food product. The

Frito-Lay film was designed to delaminate outward and away from the product during this pinch-grip motion.

21. This is significantly different from the way in which the Bosch/Minigrip prototype reclosable package was opened. There, the package was opened at the top, above the zipper, from the consumer side of the bag by tearing the tear strip transversely across the package and then opening the primary seal downward into the product side of the package.

22. In the latter part of December 1996, I conceived the invention of a reclosable bag that could solve the problems we experienced with the Bosch/Minigrip prototype. In particular, I thought that we should not be attempting to incorporate a reclose structure which requires the transverse and downward forces on the standard Frito-Lay snack film that it was not designed to experience. Instead, I thought that we should use a reclose solution that took advantage of the standard way that consumers opened Frito-Lay's snack food products, i.e. in a pinch-grip motion.

23. My invention involved attaching a first portion of the zipper material to a front wall of the Frito-Lay's standard flexible bag material and attaching a second portion of the zipper material to the back wall of that material so that the zipper could be engaged just below the top seal of the bag and above the food product. The Frito-Lay film used for the salty snack food product is a flexible, elastomeric material. The top seal and the zipper material would be opened by manually gripping the front and back walls of the bag and pulling apart with a force that would open the zipper material and then the top seal of the bag from the product side outward in a single pinch-grip opening motion. Because we wanted the package to be reclosable, the flexible film needed to withstand the pinch grip opening process without tearing

or deforming. I knew this was a quality of the Frito-Lay standard film which is opened using the pinch-grip motion without tearing or deformation.

24. I thought that my pinch-grip reclosure solution would have several advantages over the Bosch/Minigrip "tear strip / peel-seal" reclosure design. First and foremost, it would solve the problem with uncontrollable tearing created by opening the tear strip, and the delamination problem created by delaminating the film down into the bag when the primary seal was opened. By using a pinch grip opening, the top seal would delaminate in an upward direction away from the food product just like it normally does with the Frito-Lay snack products.

25. Further, consumers would not have to be re-educated to use the pinch-grip reclosure package. They would open the package just like they opened other salty snack food packages from the product side outward. In contrast, with the Bosch/Minigrip tear strip / peel-seal reclosure design, consumers would have to be educated to open the package from the consumer side inward. Also, with the Bosch/Minigrip reclosure design, approximately one-half inch of film material is torn off with the tear-strip. Considering the large volume of packages that Frito-Lay manufactures, avoiding wasting this material would result in substantial cost reductions.

26. After my conception, I immediately set out to reduce this invention to practice. On January 2, 1997, I had a telephone conversation with Bob Hogan at Minigrip and Steve Mulder at Bosch. I explained to them the problems we were having with the existing prototypes. I also disclosed to them my invention of the pinch-grip reclosable package which I believed would solve these problems. In particular, I disclosed to them my idea of attaching the zipper material to the front and back walls of the Frito-Lay's standard flexible bag material so that the

zipper could be engaged just below the top seal of the bag and above the food product. I disclosed to them that the top seal and the zipper material could be opened by the consumer by manually gripping the front and back walls of the bag and pulling apart with a force that would open the zipper material and then the top seal of the bag from the product side outward in a single pinch-grip opening motion. After consuming the snack food, the consumer could then reclose the package using the zipper material. I explained to them that this concept would eliminate the need for tear strips, peel seals and the like.

27. On page 1 of my laboratory notebook (JX 2033), I recorded notes of the conversation I had with Bob Hogan and Steve Mulder on January 2, 1997. These notes state that I discussed with Bob Hogan (Minigrip) and Steve Mulder (Bosch) "issues with existing bag reclosure prototypes." The next line states that the "tear feature does not work reliably & consistently." This refers to our discussion regarding film tearing when we attempted to open the package exposing the zipper. The next point states that I "asked Minigrip to develop a Prototype that allows consumer to open bags like they open current flex bags (using pinch grip motion)." This refers to the disclosure of my idea of attaching the zipper material to the front and back walls of the Frito-Lay's standard flexible bag material so that the zipper could be engaged just below the top seal of the bag and above the food product, and that the top seal and the zipper material could be opened by the consumer like they open current flex bags in a pinch grip motion, i.e. by manually gripping the front and back walls of the bag and pulling apart with a force that would open the zipper material and then the top seal of the bag from the product side outward in a single pinch-grip opening motion. By my reference to "current flex bags," I was discussing the standard Frito-Lay film used for its salty snack food products. This page was signed by me and Stephen Callahan on January 24, 1997.

28. My notes also reflect that I explained the benefits of my pinch-grip reclosable package concept. I state that this "concept eliminates need for tear strips, peelable seals, etc." (JX 2033, pg. 1).

29. During our January 2, 1997 conversation, I also communicated that my concept would require redesign of the Minigrip proposed zipper to reduce the opening side force when opened from the product side of the bag. This is reflected on page 1 of my laboratory notebook (JX 2033), where my notes state that the "concept requires redesign of Minigrip/Bosch proposed zipper to reduce zipper opening force (if opened from underside of zipper)." The reason for this is because, with the Minigrip proposed zipper, the zipper opening force from the product side is much larger than the zipper opening force from the consumer side. For example, it was my understanding that the consumer side opening force of the Minigrip zipper was approximately 1.5 to 2 lbs. and the product side opening force was approximately 5-6 lbs. This higher product side opening force is intentionally designed to keep the product in the bag, and the lower consumer side force is intentionally designed to make is easier for the consumer to open the bag. Because my concept involved opening from the product side, the zipper opening force had to be reduced. If not, the consumer experience in pinch-grip opening the bag would be different and there would be a risk that the zipper material would strip off the bag walls.

30. I also explained during this conversation that the "zipper opening force must approach bond strength of sealed film when opened." This is also reflected in my notes of that conversation (JX 2033, page 1). My idea here was that if the consumer is going to open the reclosable bag like they open the current salty snack food bags in a pinch-grip motion, the force required to open the zipper should approach the force required to open the top seal of the bag. In that case, the consumer would have the same experience opening the bag with the reclosable

feature that he or she would have opening the bag without the reclosable feature. With the standard Bosch/Minigrip zipper, with a much higher product side opening force, the consumer would have difficulty opening the zipper using the pinch-grip motion. Further, the force required to open the zipper from the product side would have to be reduced and approach the scaled film opening force so that the side wall would not delaminate causing the zipper material to strip off during the pinch grip opening.

31. I also maintained another notebook during my employment with Frito-Lay in which I recorded my work in connection with the bag reclosure project at Frito-Lay (as well as other projects) during the period of September, 1996 through May, 1997. A copy of this notebook is attached as JX 2036. On page 47 of that notebook, I wrote that on January 2, 1997, I had a telephone conversation with Bob Hogan. My notes state that "zipper opening force lower than bond strength." As also reflected on page 1 of laboratory notebook (JX 2033), this refers to my disclosure to him that the zipper opening force from the product side should approach or be lower than the bond strength of the top seal of package when opening the package using the pinch-grip motion.

32. I prepared drawings and a description comparing the existing Minigrip bag reclosure design and the pinch-grip design that I had conceived and discussed with Bob Hogan and Steve Mulder on January 2, 1997. This is shown on page 2 of my laboratory notebook (JX 2033), which was signed by Stephen Callahan and me on January 24, 1997. In the portion of the drawing entitled "(Existing) Minigrip," there is a perforated tear flange located above the zipper that is torn off by the consumer to access the zipper material. I also note that it takes 1.5 to 2.0 lbs. of force for the consumer to open the zipper, and 5-6 lbs. for internal opening force (from the product side) in the existing Minigrip zipper design.

33. In the portion of my drawing entitled "(Proposed) M. Jurgovan," the male and female portions of the zipper material are attached to the front and back walls of the bag film. The zipper and top seal are opened by pulling apart the side walls of the flexible film in pinch-grip pulling motion. As reflected in the drawing, the tear flange is eliminated. Also, I note that the "zipper opening force from the top or bottom needs to approach the sealed film opening force." As I explained above, this is because I wanted the consumer's opening experience to be the same for the reclosable package as it is with the standard snack food bag without a reclose feature, and because I did not want the zipper material to strip off due to delamination of the side walls of the flexible material. I further note that the "[p]erforated tear flange [is] eliminated."

34. I also disclosed my invention to others at Frito-Lay. By at least January 24, 1997, I had disclosed my invention to my supervisor, Steve Callahan, at Frito-Lay. This is reflected by the fact that Steve Callahan signed my laboratory notebook at pages 1 and 2 on January 24, 1997 containing my notes of my conversation with Bob Hogan and Steve Mulder, and the drawings reflecting my invention and the differences between it and the existing Minigrip design.

35. On January 29 and 30, 1997, we had a meeting with Bosch and Minigrip to discuss the zipper reclosure packaging. This meeting was attended by at least myself and Steve Callahan from Frito-Lay, Bob Hogan and Art Malin of Minigrip, and Steve Mulder of Bosch. On January 21, 1997, I prepared an agenda for this meeting which was sent to Bob Hogan, Art Malin, Steve Mulder and Peter Loveland, and copied to Joel Berry, Steve Callahan, John Fulcoly, Monte Jump, Tony Knoerzer, David Mischkot, Scott Reinert and Dan Shaw of Frito Lay. A copy of this document is attached as JX 2037. My agenda for that meeting reflects that there would be discussion of "bag opening issues / alternate zipper prototypes" and "further zipper alternatives." (JX 2037).

36. At this meeting, I discussed my pinch grip concept as an alternative to the Minigrip tear strip / peel-seal reclosure design. I explained my idea of applying a reduced opening force zipper to the standard Frito-Lay snack food film below the top seal, and pinch grip opening the zipper and top seal by pulling the side walls of the bag in a single pinch grip motion. I explained that this solution would solve the problems associated with tearing and delamination experienced with applying the Bosch/Minigrip design to the Frito-Lay film by eliminating the tear strip. I also explained the benefit of not having to re-educate consumers to open the snack food packages.

37. Based on my telephone conversations and personal meetings with Bob Hogan and Art Malin, I understood that Minigrip was not enthusiastic about my pinch-grip design. Instead of pursuing a different direction and zipper design, they wanted to focus primarily on solving the problems resulting from applying the Bosch/Minigrip zipper design to the Frito-Lay flexible films.

38. On February 11 and 12, 1997, I performed testing with Larry Share at Minigrip on the standard Minigrip zipper configuration applied to standard Frito-Lay film. The results of these tests are recorded on pages 7 through 14 of my laboratory notebook (JX 2033). As reflected in my notes (JX 2033, page 7), we experienced the same problems with film tearing during the opening process as we had in the past with this approach. My notes state that the "perforation separation force is greater that the film interlaminar bond strength." As a result, when the perforation strip was pulled, the film delaminated or tore in an uncontrolled and random manner. My notes also state the problem I had identified previously with the use of the Bosch/Minigrip zipper on the Frito-Lay film. I "[c]ould not tear across the back seal; the product must be accessed from the top, front, or bottom of the package in order to avoid the back

seal" (emphasis original). Specifically, the current Frito-Lay bag opening method involves a pinch-grip motion where the bag is opened and the film delaminates up and away from the product. When the bag is opened from top, as with the Bosch/Minigrip design, the film delaminates into the product area. Stephen Callahan and I signed this laboratory notebook page on February 24, 1997.

39. On February 20, 1997, I made a presentation to members of the R&D packaging organization at Frito-Lay to discuss the various bag reclosure options that had been considered to date. Pages 15 through 17 of my laboratory notebook (JX 2033) contains the information that I presented to Joel Berry, Steve Callahan, Don Keel, Monte Jump, Joe Sagel, Bill Derkach and Jim Specht at this meeting. Options 1, 3 and 4 required opening the bag from the consumer side using various designs, including scissors, tear strips, etc., and were deemed not preferred. Options 2A and 2B, which used a peel-seal and were opened from the consumer side, were being evaluated by Bosch/Minigrip. Option 5 (shown on page 17) is my pinch-grip concept which is opened from the product side by pulling the bag walls below the zipper. As indicated in my notes, this is the "preferred concept." Referring to the figures, "B" is the upper seal that enabled an air tight package that preserves product freshness. "TE" refers to the seal or tear strip that provides tamper evidence to the consumer. In options 1 and 5, the top bag seal performed both product freshness and tamper evidence functions. In all options, "Z" refers to the zipper. Stephen Callahan and I signed this laboratory notebook page on February 24, 1997.

40. On page 19 of my laboratory notebook (JX 2033), I attached a copy of a February 26, 1997 facsimile from Art Malin at Minigrip. This facsimile reflects the first response to my request for a re-designed zipper for use in my pinch-grip openable package. The proposed design was similar to the design I suggested to Minigrip, but differed in that the top portions of

the zipper flanges were connected together, and a perforation was created in one of the top zipper flanges between the zipper engagement members and the top seal of the bag. Accordingly, after the zipper engagement members would open under the pinch-grip pulling force, the perforation would be separated and the then the top seal opened. This design was never pursued. I received this facsimile on February 27, 1997 and entered it into my laboratory notebook that day.

41. On page 22 of my laboratory notebook (JX 2033), I attached a copy of a letter I received from Steve Mulder to me dated February 27, 1997. This letter states that "[per] our discussion, I would like to outline the areas of the Trans-Zip design that would have to be taken into consideration if we were to start working with the zipper profile that you have suggested to achieve a "pinch" opening bag with zipper (emphasis added)." This letter acknowledges that I came up with the pinch grip concept and communicated this to Steve Mulder. This letter also reflects that changes would have to be made to the equipment design to manufacture the pinch-grip design. In this letter, Steve Mulder states "I hope this will give you an idea of the scope of engineering/manufacturing effort that will have to go into the pursuit of this method." To me, this was consistent with the reaction that I had received from Bosch and Minigrip to date that my pinch grip concept would require too much redesign effort and that pursing their tear strip / peel seal reclosure solution would be preferable. I fixed this letter into my laboratory notebook on February 28, 1997.

42. I prepared and sent a memorandum, dated March 10, 1997, to Joel Berry, Steve Callahan, Bill Derkach, Don Keel, Jerry Reaves and Gary Wilhemi of Frito-Lay, with copies to Bob Hogan (Minigrip), Monte Jump (Frito-Lay), Art Malin (Minigrip) and Steve Mulder (Bosch), entitled "Bag Opening Development Update." This memorandum describes the options

being pursued to identify a functional opening method on a package with zipper reclosure. A copy of this memorandum is attached as JX 2038.

43. The first option identified in my March 10, 1997 memo is my "'Pinch-Grip' Method," which I indicate as being the "Preferred" method. My memorandum states that the pinch-grip method "[a]llows consumers to open packages using current 'pinch-grip' manner." I also explained that the "zipper lock mechanism must be redesigned to equilibrate the zipper opening force when opening the package from either direction." (JX 2038).

44. I also noted in my memorandum the fact that Minigrip had expressed several concerns with my pinch-grip concept and with the zipper design characteristics (such as the zipper having equal opening forces from both directions) that I requested that they modify to implement my pinch-grip concept:

> Minigrip has expressed several concerns with this option, as they have not previously worked with zippers having equal opening forces from both directions. They are concerned with how this zipper will travel over the former shoulder (and whether it will pop open due to the lower opening forces present). Minigrip is also concerned with the impact of the new -13 seal and on the die design, as it behaves differently than other sealants. The zipper material delivery to Bosch was delayed due to rework required with the production die after initial fabrication, as further redesign of the lock mechanism was required to achieve the desired zipper opening forces in both directions.

(JX 2038).

45. The other options identified in my March 10, 1997 memorandum are modifications to the Bosch/Minigrip design which require opening the bag from the top using either a peel apart film seal or using a zipper peelable seal. I noted that "[a]gain, these options all focus on integrating the zipper reclosure with our current flexible packaging structures." Through our numerous conversations and interactions, the current flexible packaging structures

referred to in the memorandum were known to all recipients to be the Frito-Lay's flexible film being used for its salty snack food products.

46. On March 11, 1997, Art Malin of Minigrip sent me facsimile disclosing a zipper design which utilized a film-to-film perforation and peel seal. A copy of this facsimile is attached as JX 2039. Again, this zipper design is openable from the top consumer side, rather than from the product side.

47. Attached as JX 2040 is a two page document reflecting a meeting that took place among Frito-Lay, Minigrip and Bosch on March 14, 1997 to discuss the reclosable bag opening concepts. This document was prepared by Art Malin of Minigrip. I recognize these drawings and the handwriting to be from Art Malin based on the numerous written correspondence I have received from him. As this document reflects, the date of the meeting was March 14, 1997. While the date is slightly cut off on the first page, it is clear on the second page to be March 14, 1997.

48. The first page of this document states "top of the bag opening concepts" and shows five different concepts that utilize some type of peel seal or perforation, and are all opened at the top consumer side of the package. The second page of the document states "pinch-grip opening concepts" and "1 - Frito-Lay" and "2 - Minigrip-Zippak." The first drawing is my pinch-grip opening concept that I disclosed to Art Malin and Bob Hogan of Minigrip which includes the first and second zippers members attached to the front and back of the flexible Frito-Lay film and engaged below the top seal of the package. In this embodiment, the snack food product is located below the zipper. In use, the consumer would pinch the side walls of the flexible package and pull outwards with a pinch-grip pulling force to open the zipper members and then the top seal in a single pinch-grip pulling motion without tear or deformation of the bag

walls. The consumer would then have access to the snack food product in the package and reclose the package by re-engaging the zipper members. The second drawing is of the pinch grip structure utilizing a perforation between the zipper member and the top seal that Art Malin had proposed to Frito-Lay long after I disclosed my concept to him. This document is an acknowledgment by Minigrip that I had disclosed my pinch grip concept to them by no later than March 14, 1997.

49. I prepared and sent a memorandum to Joel Berry with copies to Steve Callahan, Bill Derkach, Don Keel and Jerry Reaves, all of Frito-Lay, dated March 17, 1997, entitled "Period 3 Status Report." A copy of this memorandum is attached as JX 2041. This memorandum was prepared by me in connection with my responsibilities at Frito-Lay and it describes the work being performed on the bag reclosure project during "Period 3" at Frito-Lay. The memorandum reflects that tests continue to identify a bag opening concept that works when the reclosure is applied on existing film structures and that concepts will be tested this week to focus on avoiding film delamination that occurs when the package is opened downward, or toward the product. I also state that film alternatives are being sought from our suppliers that allow the package to peel open at the sealant (as opposed to the interlaminar bonds). This reflects the fact that, in view of the problems we experienced applying the Bosch/Minigrip zipper design to standard Frito-Lay film, we began to explore the option of using different film options to accelerate development of the reclosure project.

50. I prepared and sent a memorandum to Joel Berry with copies to Steve Callahan, Bill Derkach, Bob Hogan, Monte Jump, Don Keel, Art Malin, Steve Mulder and Scott Reinert, dated March 26, 1997, entitled "BAG RECLOSURE PROJECT MILESTONE SCHEDULE (Revised to address Broadway Project Requirements). This memorandum was prepared by me

in connection with my responsibilities at Frito-Lay and it describes a revised schedule for the bag reclosure program with dates for various "milestones," (deliverable and dates). A copy of this memorandum is attached as JX 2042. The Broadway Project refers to Frito-Lay's introduction of the WOW potato chips, which were using the olestra oil. Frito-Lay wanted to use a reclosable bag with the introduction of this new product. This also put pressure on the group to come up with commercially viable reclosable bag solution in a relatively short time frame. This additional time pressure was the impetus for looking at reclosable bag solutions that did not involve Frito-Lay standard film.

51. I prepared and sent a memorandum to Joel Berry with copies to Steve Callahan, Bill Derkach, Don Keel and Jerry Reaves, all of Frito-Lay, dated April 11, 1997, entitled "Period 4 Status Report." This memorandum was prepared by me in connection with my responsibilities at Frito-Lay and it describes the work being performed on the bag reclosure project during "Period 4" at Frito-Lay. A copy of this memorandum is attached as JX 2043. The memorandum states that in order to maintain the accelerated schedule, we were evaluating a premium 3-ply structure (in contrast to Frito-Lay's standard 2-ply film) that delivers a peelable seal which allows the consumer to open the package without tearing the package or damaging the zipper. At that time, we knew that "[t]his 3-ply structure is potentially significantly more expensive than existing structures." (JX 2043, page 2).

52. I prepared and sent a memorandum to Joel Berry with copies to Steve Callahan, Bill Derkach, Marty Dierl, Don Keel and Jerry Reaves, all of Frito-Lay, dated May 9, 1997, entitled "Period 5 Status Report." This memorandum was prepared by me in connection with my responsibilities at Frito-Lay and it describes the work being performed on the bag reclosure project during "Period 5" at Frito-Lay. A copy of this memorandum is attached as JX 2044. The

memorandum reports that we are evaluating premium test films from Bryce, Curwood and Printpack to identify film structures that allows functional integration and operation with the zipper.

53. I prepared and sent a memorandum to the Reclosure Team, dated May 14, 1997, entitled "Minutes for Bag Reclosure Meeting at Minigrip, Orangeburg, NY." This memorandum was prepared by me in connection with my responsibilities at Frito-Lay and it provides a summary of the May 13,1997 meeting between Frito-Lay and Minigrip to disclose progress on the bag reclosure project. A copy of this memorandum is attached as JX 2045. The memorandum states that the "immediate objective remains to identify a package design / film structure combination that will provide the highest probability of success in the shortest time-frame to support a fall test market." In connection with this goal, we thought that an immediate solution that would meet these objectives was to use a Minigrip zipper on the premium "peel seal" film material. We then wanted to pursue a peelable zipper seal with the standard Frito-Lay film. We then wanted to develop the pinch grip openable bag which required a lower internal zipper opening force, but allowed consumers to open packages the way a large majority of them naturally do today. The initial evaluation of the pinch grip zipper material was scheduled for mid/late June, 1997.

54. I prepared and sent a memorandum to Art Malin of Minigrip, dated May 23, 1997, entitled "'Peelable Zipper Seal' Film Samples." This memorandum was prepared by me in connection with my responsibilities at Frito-Lay and states that we were able to adhere the zipper strips received from Minigrip to the different "Peel Seal" test laminations with a zipper-to-film bond that was stronger than the film-to-film cohesive bond. A copy of this memorandum is attached as JX 2046. The memorandum also states "Frito-Lay requests delivery of the

'Peelable Zipper Seal' test materials by Friday, June 6th and the 'Pinch Grip' test materials by Friday, June 20th."

55. I prepared and sent a memorandum to my new supervisor, Donna Diermeier, with copies to Joel Berry, Steve Callahan, Bill Derkach, Marty Dierl, Don Keel and Jerry Reaves, all of Frito-Lay, dated June 4, 1997, entitled "Period 6 Status Report." This memorandum was prepared by me in connection with my responsibilities at Frito-Lay and it describes the work being performed on the bag reclosure project during "Period 6" at Frito-Lay. A copy of this memorandum is attached as JX 2047. The memorandum reports that the initial testing of the "peelable bag seal" test packaging laminations (with the Minigrip test zipper film) has been completed with positive results. The system delivered packages with adequate zipper adhesion to the test laminations as well as adequate "peel seal" performance during bag opening. The memorandum also states that it was concluded during the Broadway/Reclosure update that Bag Reclosure will not be introduced as part of the initial WOW rollout.

56. I prepared and sent a memorandum to Donna Diermeier with copies to Steve Callahan, Bill Derkach, Marty Dierl, Don Keel and Jerry Reaves, all of Frito-Lay, dated June 27, 1997, entitled "Period 7 Status Report." This memorandum was prepared by me in connection with my responsibilities at Frito-Lay and it describes the work being performed on the bag reclosure project during "Period 7" at Frito-Lay. A copy of this memorandum is attached as JX 2048. The memorandum reports that a decision was made to introduce Supersize Lays, Ruffles, Tostitos RSTC, and Doritos Nacho Cheese in two (in store) test markets for P11, W4 (i.e. the end of November/beginning of December, 1997). A decision is also made to make the product for the test market on the leased Bosch bagmaker at Frito-Lay's TPC (Technology Process Center, located in Dallas, Texas) facility.

57. I prepared and sent a memorandum to Donna Diermeier with copies to Steve Callahan, Bill Derkach, Marty Dierl, Don Keel and Jerry Reaves, all of Frito-Lay, dated July 30, 1997, entitled "Period 8 Status Report." This memorandum was prepared by me in connection with my responsibilities at Frito-Lay and it describes the work being performed on the bag reclosure project during "Period 8" at Frito-Lay. A copy of this memorandum is attached as JX 2049. The memorandum reports that efforts continue to optimize the packaging film, zipper materials and jaw design prior to the test market start up, and that a metallized lamination from Curwood has been recommended as a preferred lamination. The memorandum also states that evaluation of a new Minigrip zipper has been successfully run the week of July 21.

58. Marty Dierl and I prepared and sent a memorandum to Donna Diermeier with copies to Steve Callahan, Bill Derkach, Monte Jump, George Karayiannakis, Don Keel and Jerry Reaves, all of Frito-Lay, dated August 28, 1997, entitled "Period 9 Status Report." This memorandum was prepared by me and Marty Dierl in connection with our responsibilities at Frito-Lay and it describes the work being performed on the bag reclosure project during "Period 9" at Frito-Lay. A copy of this memorandum is attached as JX 2050. The memorandum reports that, based on the evaluation of the new metallized test lamination from Curwood, the "tear potential present in the previous test lamination was eliminated, while the desired peel seal properties, tear strip capabilities, etc. were all maintained." Marketing chose to begin the test market with Lays®, Ruffles® and Nacho Cheese Doritos® in the metallized film.

59. At this stage, a viable reclosable bag solution had been identified for the test market using the premium Curwood film. However, we knew that because of the significantly higher cost of that film, it would never be a long-term commercial solution for Frito-Lay. Marty

Dierl and I focused our attention on finalizing a reclosable bag structure that could be used with Frito-Lay's standard film.

60. During the weeks of August 25, 1997 and September 1, 1997, Marty Dierl and I presented two pinch grip concepts at Frito-Lay in connection with the bag reclosure project. The first was the pinch grip concept I had previously discussed which involved opening the zipper members and the top seal by manually pulling the bag sidewalls with a pinch grip pulling force. The second concept involved a unique way of obtaining a pinch grip openable bag by applying a standard Minigrip 2 lb. (consumer side) and 8 lb. (product side) opening force zipper at the bottom of the package and inverting the graphics. With this approach, the product side zipper opening force would be 2 lb. thereby permitting pinch grip opening without stripping the zipper from the standard Frio-Lay film.

61. On page 31 of my laboratory notebook (JX 2033), I describe these two concepts. Regarding my pinch grip concept, I state that "for pinch grip, equalize the internal & external opening forces to allow for bag opening from the bottom (internal/product) side without stripping off zipper on unsupported/hinged side." I also identify that the current zipper has 2 lb. (consumer side) and 8 lb. (product side) opening forces, and that the proposed zipper has 2 lb. (consumer side) and 2 lb. (product side) opening forces. The laboratory notebook page is signed by Marty Dierl and me on September 16, 1997.

62. On pages 32-34 of my laboratory notebook (JX 2033), I describe five options being considered. The third option, described on page 33 of the laboratory notebook, is of a pinch grip openable bag using standard Frito-Lay snack food material and a zipper having 2 lb. (consumer side) and 2 lb. (product side) opening forces. The fourth option, also described on page 33 of the laboratory notebook, is of the graphics inverted pinch grip openable bag using

standard Frito-Lay snack food material and a zipper having 8 lb. (consumer side) and 2 lb. (product side) opening forces. These laboratory notebook pages are signed by Marty Dierl and me on September 16, 1997.

63. On September 2, 1997, I contacted Art Malin at Minigrip, as reflected on page 31 of the my laboratory notebook (JX 2033): "Minigrip [was] contacted on 9/2 (Art Malin)." During this call I requested that Minigrip supply a zipper that would have 2 lb. (consumer side) and 2 lb. (product side) opening forces for testing prototypes at Frito-Lay. The notes of my conversation are also recorded on page 41 of notebook JX 2051. I also maintained this notebook during my employment with Frito-Lay in which I recorded my work in connection with the bag reclosure project at Frito-Lay during the period of June 1997 through March 1998. A copy of this notebook is attached as JX 2051.

64. I also presented other bag reclosure options to Minigrip at a meeting on September 24, 1997, as reflected on pages 35-37 of the my laboratory notebook (JX 2033). Option 2, described on page 35, is a reclosable bag using premium material and "peel seal" opening mechanism which is openable from the consumer side. However, this option also incorporates a zipper having 2 lb. (consumer side) and less than 2 lb. (product side) opening forces and, therefore, is pinch grip openable as well. Option 3, described on page 37, is a pinch-grip openable bag using standard Frito-Lay material using a zipper having 2 lb. (consumer side) and less than 2 lb. (product side) opening forces. As reflected on page 35, I requested the less than 2 lb. internal force zipper from Minigrip on September 18, 1997. These laboratory notebook pages are signed by Marty Dierl and me on September 24, 1997.

65. By at least September 25, 1997, we received from Minigrip zipper material that had 2 lb. (consumer side) and 2 lb. (product side) opening forces, as well as a reversed male and

female zipper member. Jerry Reaves and I made prototype pinch grip openable bags using this zipper material and standard Frito-Lay snack food film by at least September 25, 1997. These prototypes had the male and female side zipper portions attached to the front and back walls of the standard Frito-Lay film (which is a flexible, elastomeric material) and were engaged below the top seal of the bag. These were not "hand made" prototypes, but were made using production grade VFFS bag making equipment. Jerry Reaves is a technician at Frito-Lay with expertise in maintaining and running bag making equipment.

66. After these bags were made, Jerry Reaves and I pinch grip opened them and then reclosed them to see if they could be opened and reclosed without tearing or deformation, i.e. to see if they worked for their intended purpose. On page 50 of my notebook (JX 2051), I recorded the results of the testing on these pinch grip openable bags. As reflected on that notebook page, I wrote "Bosch Zipper test" and "2#/2# Reverse M/F" at the top of the page. The "Bosch Zipper test" refers to the fact that we were making these bags on a Bosch bag maker that we had at the Technology Building at Frito-Lay in Plano, Texas. The "2#/2# Reverse M/F" refers to the fact that were using zipper material from Minigrip that had 2 lb. (consumer side) and 2 lb. (product side) opening forces, as well as a reversed male and female zipper profile.

67. Underneath this information, I have two columns entitled "Good" and "Bad" and number of individual scores in each column. This reflects the fact that if Jerry or I successfully pinch-grip opened and then reclosed one of the bags, I made a mark under the good column. If Jerry or I pinch grip opened one of the bags and the zipper material would strip off the bag, I would make a mark in the "Bad" column. The test results reflect that we tested 41 pinch grip openable bags as described above. We were able to successfully pinch-grip open and reclose 30 of those bags. We were not able to successfully open 11 of those bags. I considered the nearly

70% success rate to establish that pinch grip openable bags that we made worked for their intended purpose. This is not to say that the process was ready for commercialization under Frito-Lay's exacting commercial standards. Indeed, Frito-Lay attempts to achieve a very low defect rate with its commercial food products. However, these tests did prove that product worked for its intended purpose.

68. Marty Dierl and I prepared and sent a memorandum, dated September 25, 1997, to Donna Diermeier entitled "Period 10 Status Report," in connection with our responsibilities on the bag reclosure project. A copy of this memorandum is attached as JX 2052. This memorandum was copied to Steve Callahan, Bill Derkach, Monte Jump, George Karayiannakis, Don Keel, Jerry Reaves and Steve Tucker. In this memorandum, we report the successful testing of the pinch grip bag which I describe above in paragraphs 65-67. In particular, we state that:

> A series of modifications to the zipper profile has been identified that may allow introduction of the "pinch grip" method (using existing packaging film) without significant zipper or bagmaker redesign. Testing of a lower interior opening force zipper has reduced stripping the zipper off the film (due to film delamination) from 100% to approximately 30%.

(JX 2052). The reduction of zipper stripping to approximately 30% refers to the results of the testing reflected on page 50 of my notebook JX 2051.

69. During the Fall of 1997, the bag reclosure group at Frito-Lay was preparing for a Reclosure Test Market to begin in late 1997 or early 1998. Two different reclosure designs were being considered for the Reclosure Test Market during the Fall of 1997. (JX 2052). The first design, which I describe above in paragraph 39, would utilize the Minigrip tear strip / peel seal reclosure structure applied to the premium, multi-laminate film structure supplied by Curwood. Although much less likely because of time constraints, the second design was my pinch-grip design applied to the standard Frito-Lay snack food film. (JX 2052).

70. In September 1997, Frito-Lay conducted consumer testing to see whether consumers would read and follow opening instructions on the reclosable package. These tests involved providing the "peel-seal" reclosable bag design to consumers and asking them to open it. The packaging material contained instructions to tear at the perforation, then peel open the bag to gain access to the snack food products. These tests revealed that only 56% of the consumers actually saw the instructions prior to attempting to open the package, and 44% percent did not pay attention to package instructions. These consumers, nearly half, would open the package using the standard pinch grip motion. Because the product side opening force of the zipper used in the "peel-seal" design was large, approximately half of the zippers could be stripped from the bag walls if the packages were pinch grip opened. This is reflected in my September 25, 1997 memorandum. (JX 2052).

71. Because we knew that a substantial percentage of the population would attempt to pinch grip open the reclosable bag with the consumer side openable, "peel-seal" design, we decided to incorporate a reduced force zipper with the "peel-seal" design to reduce the potential that zippers would be stripped off of packages when opened incorrectly, i.e. using a pinch grip motion. This also is reflected in my September 25, 1997 memorandum. (JX 2052).

72. I prepared and sent a memorandum to Donna Diermeier, dated October 20, 1997, entitled "Period 11 Status Report" in connection with my responsibilities on the bag reclosure project. The memorandum, attached at JX 2053, was copied to Steve Callahan, Bill Derkach, Marty Dierl, George Karayiannakis, Don Keel, Mike Munro, Jerry Reaves, Steve Tucker and Johannes Veit, all of Frito-Lay. As reflected in my memorandum, a decision had been made to go forward with the "peel-seal" design with the Curwood premium material for the reclosure test market. We also decided to use a reduced force 2 lb. consumer side and 2 lb. product side

opening force zipper to reduce zipper stripping when the consumers would pinch grip open the bag. This is reflected in my memorandum by the reference to the "zipper (2#/2#)."

73. Although great progress had been made with the pinch grip design, my October 20, 1997 memorandum states "[e]valuation of the 'pinch grip' bag opening solution could not be optimized for zero defects quick enough to meet the test market timing commitments." (JX 2053). However, I believed that we had shown that the pinch grip bag would work for its intended purpose. This belief is reflected by the my statement "[l]egal options as to how to protect these 'unique' bag opening solutions (exclusivity, patentability) are being pursued with T. Schur," referring to Tom Schur, Frito-Lays's corporate patent counsel.

74. On pages 59 and 60 of my notebook (JX 2051), the blanked-out portions reflect my notes of a meeting with Tom Schur on October 15, 1997 during which legal advice was sought and obtained regarding exclusivity and patent issues relating to the pinch grip invention.

75. On page 69 of my notebook (JX 2051), the blanked-out portion reflects my notes of a meeting with Tom Schur on November 5, 1997 during which legal advice was sought and obtained regarding exclusivity and patent issues relating to the pinch grip invention.

76. On November 5, 1997, I received a facsimile from Ron Ramsey of Minigrip attaching a drawing of a male and female zipper profile modified to reduce the consumer side opening force when the package is pinch gripped. A copy of that facsimile is attached as JX 2054. The facsimile states that the drawing is of the "zipper that you will receive tomorrow." I pasted a copy of this facsimile into my laboratory notebook (JX 2033) on page 43.

77. On November 6, 1997, I received the Minigrip zipper material referenced in the November 5, 1997 facsimile. Jerry Reaves and I made prototype pinch grip openable bags using this zipper material and standard Frito-Lay snack food film on November 6, 1997. These

prototypes had the male and female side zipper portions attached to the front and back walls of the standard Frito-Lay film (which is a flexible, elastomeric material) and were engaged below the top seal of the bag. These prototypes were made using production grade Bosch VFFS bag making equipment at Frito Lay.

78. After these bags were made, Jerry Reaves and I pinch grip opened and then reclosed them to see if they could be opened and reclosed without the zipper stripping off or experiencing significant "mooning" under the zipper/bag wall seal. "Mooning" refers to partial lifting of the zipper flange material from the middle area of zipper bag wall seal. On page 70 of my notebook (JX 2051), I recorded the results of the testing on these pinch grip openable bags. As reflected on that notebook page, I wrote "Long Female Mod Zipper" and "(2#/<2#)" at the top of the page. This refers to the reduced opening force zipper material identified in the November 5, 1997 memorandum from Ron Ramsey.

79. Underneath this information, I recorded the results of my testing. Jerry Reaves and I ran lots of 30, 31, 40 and 40 pinch grip openable bags. My test results indicate that out of approximately 140 bags, we experienced a total of 4 strip failures and 3-4 mooning failures. (JX 2051 at 70). These tests further confirmed that my pinch grip design worked for its intended purpose. On page 46 of my laboratory notebook (JX 2033), I summarize these test results in an entry dated November 6, 1997. As reflected on that page, I wrote "Long Female, 2# / <2# Zipper (Ref 11/5 R Ramsey memo)." This reflects the fact that we were testing bags using reduced force zippers referred to in the November 5, 1997 facsimile from Ron Ramsey. Under this heading, I wrote "4/150 Stripped", "4/150 Mooning (Visible)" and "-10-20% Minor mooning into end seal." This is consistent with the results described on page 70 of my notebook

(JX 2051). Page 46 of my laboratory notebook page was signed and dated by Marty Dierl and me on January 9, 1998.

80. I prepared and sent a memo entitled "Bag Reclosure Update," dated November 7, 1997, in connection with my responsibilities on the bag reclosure project. A copy of this memo is attached as JX 2063. This memo provides a general project update and states that the reclosure test market would begin in Period 13 Week 3 (i.e. on or about December 18, 1997) with the "peel-seal" package opening feature and the reduced opening force zipper developed to manage opening failure risk. (JX 2063, pages 7 and 8). The memo further states that test market would be followed by a national launch with the pinch grip concept with the standard Frito-Lay film. (JX 2063, page 9).

81. I prepared and sent a memorandum to Donna Diermeier, dated November 20, 1997, entitled "Period 12 Status Report" in connection with my responsibilities on the bag reclosure project. The memorandum, attached at JX 2055, was copied to Steve Callahan, Bill Derkach, Marty Dierl, George Karayiannakis, Don Keel, Jerry Reaves and Johannes Veit. I report in this memorandum that line commissioning continues at Frito-Lay's Technology Processing Center in preparation for the December 1997 test market in Eau Claire, WI and Cedar Rapids, IA. The memo also reflects our continuing efforts to optimize the pinch grip opening package design. The blanked portion reflects my discussion with the legal department relating to the exclusivity and patenting issues.

82. During the period of December 9, 1997 to December 18, 1997, Ed Edwards and I made and tested additional pinch grip openable bags and found that they worked for their intended purpose. Ed Edwards is a technician at Frito-Lay with expertise designing, maintaining and operating bag making equipment. The bags were made at Frito-Lay's TPC facility on the

Bosch bag maker in connection with the test market launch. Specifically, the bags contained either Lays®, Ruffles® or Doritos® brand snacks and made with Curwood premium film material, the "peel-seal" opening design and a reduced force zipper to facilitate pinch grip opening.

83. After these bags were made, Ed Edwards and I pinch grip opened and then reclosed them to see if they could be opened and reclosed without stripping the zippers off of the bag walls. On page 97 of my notebook (JX 2051), I recorded the results of the testing on these pinch grip openable bags. As reflected on that notebook page, I wrote "Zipper test" at the top of the page and recorded the tests results underneath. The first test was of 10 bags in which I pinch grip opened 5 bags and Ed Edwards pinch grip opened 5 bags. We were able to pinch-grip open and reclose 9 out of 10 bags, with only one zipper stripping off during the test. This is recorded in the notebook page where I write "5 MJ 5 EE 1/10 Stripped." The remainder of the entries reflect that Ed Edwards and I tested an additional 62 bags and successfully pinch grip opened and reclosed 56 of them. In all, we successfully pinch grip opened and reclosed 65 out of 72 bags. In only 7 out of 72 bags did we observe any complete or partial stripping of the zipper material. This testing further established that these pinch grip openable bags worked for their intended purpose.

84. Marty Dierl prepared a memorandum to Donna Diermeier, dated December 18, 1997, entitled "Period 13 Status Report," with copies to Steve Callahan, myself, George Karayiannakis, Don Keel and Jerry Reaves. A copy of this memorandum is attached as JX 2056. I would have received a copy of this memorandum in the ordinary course of business at Frito-Lay. The memorandum states that "[a]dditional pinch grip zipper designs have been tested by Technology with the lowest failure rate around 10% (approx 10% of the zippers came off one

side of the bag making the zipper unacceptable for reseal)." These test results refer to the tests results recorded by me in my notebook (JX 2051) on page 97.

85. On page 49 of my laboratory notebook (JX 2033), I describe the results of the tests performed on the pinch grip openable bags discussed above in paragraphs 82-84. At the top of the page, I wrote "12/9 (?) Zipper Test" and below that, "@TPC, M. Jurgovan & E. Edwards." I wrote "12/9 (?)" because when I wrote this entry on January 20, 1998, I thought the tests were conducted on or about December 9, 1997, but I was not sure of the exact date. As discussed above in paragraphs 82-84, these tests were conducted somewhere between the December 9, 1997 entry in my notebook (JX 2051) and December 18, 1997 date of Marty Dierl's Period 13 Status Report which describes these test results (JX 2056).

86. The reference to "@TPC, M. Jurgovan & E. Edwards" refers to the fact that the tests were conducted at Frito-Lay's TPC facility by myself and Ed Edwards. My laboratory notebook (JX 2033) reflects that the zipper used in the test had a modified female and male hook and that the zipper was tested with peel-seal film and -5 sealant. The results reported on this page are consistent with the results reported on page 97 of my notebook (JX 2051) and the Period 13 Status Report (JX 2056).

87. In mid-January 1998, I had a conversation with Ron Ramsey from Minigrip. On page 112 of my notebook (JX 2051), I recorded notes from that conversation. These notes reflect a discussion about the tests referred to in paragraphs 82-86 and that they occurred on December 14, 1997.

88. On January 26, 1998, a meeting was held between members of the Frito-Lay bag reclosure team (including myself) and Minigrip. At this meeting, Minigrip provided me with a four-page handout, a copy of which is attached as JX 2057. The fourth page of the handout is a

document entitled "Frito Lay Zipper History" prepared by Minigrip. This documents purports to identify various concepts, the originator of the concepts, and the results of these concepts. I did not agree with Minigrip's version of who had generated the various concepts. However, I note that the document shows Minigrip's agreement that Frito-Lay came up with the idea of using a 2lb/2lb zipper, and that this resulted in improved pinch grip opening at an approximate 70% success rate. This is completely consistent with my recollection and our documentary records.

89. During this January 26, 1998 meeting with Minigrip, a number of ideas were exchanged to optimize the pinch grip zipper and its application to the bag wall material. One concept I came up with was to apply sealant directly on the back side of the lock mechanism. This is reflected in my laboratory notebook (JX 2033) on page 56 which I entered on February 6, 1998. This laboratory notebook page was signed by me on February 8, 1998 and by Marty Dierl on March 5, 1998.

90. I prepared a memorandum, dated February 12, 1998, entitled "Period 2 Status Report" in connection with my responsibilities on the bag reclosure project. This memo was sent to Marty Dierl with copies to Donna Diermeier, Ed Edwards, Don Keel, Jerry Reaves and Steve Tucker. A copy of this memo is attached as JX 2058. This document makes reference to this idea where it states "it was observed that a shear condition (which strips the zipper away from the film) may occur during bag opening unless the profile (lock) portion of the zipper mechanism is secured during the sealing operation."

91. On March 4, 1998, we conducted additional tests in connection with our effort to seal the profile portion of the zipper mechanism to the bag walls. As a result of this testing, we decided to modify the die by elongating and squaring off the bump area, into which the sealant

was placed. This is reflected on page 62 of my laboratory notebook (JX 2033), which was signed by me on March 4, 1998 and by Marty Dierl on March 5, 1998.

92. During the time period between March 6, 1998 and March 20, 1998, we conducted a number of tests at Frito-Lay on our Woodman Polaris bag making equipment which was retrofitted with the Bosch transverse zipper applicator. The purposes of these tests were to insure that the equipment could repeatably and reliably perform necessary functions and to test further design modifications to the reclose zipper. The results of this testing are reported in the computer printouts, attached as JX 2060.

93. During this March 6, 1998 and March 20, 1998 time period, we tested a revised zipper design on the standard Frito-Lay film which included more sealant behind the profile portion of the zipper mechanism, used a 2 lb. / 2 lb. symmetrical lock design, and was thinner than previous zippers (.015" thick vs. previous .017" thick). The results obtained with this revised zipper design were to practically eliminate zipper stripping from the bag walls during the manufacturing process and during pinch grip opening.

94. On page 64 of my laboratory notebook (JX 2033), I describe the revised zipper design and indicate that the pinch grip feature works consistently if the zipper registration is within defined tolerances and the proper head/dwell used to seal the zipper to film is used. I made this entry into my laboratory notebook on March 23, 1998 and signed it that date. On page 65 of my laboratory notebook (JX 2033), I pasted a comparison of the various zipper designs prepared by Don Keel. The top zipper is designated as "Zipper Best" and the caption indicates that this zipper was tested the week of March 16. I made this entry into my laboratory notebook on March 23, 1998.

95. On page 66 of my laboratory notebook (JX 2033), I pasted a two-page Inter-Office Correspondence dated March 18, 1998 from Larry Shore to Ron Ramsey reflecting revised zipper designs. I received a copy of this memorandum from Ron Ramsey on March 19, 1998. (JX 2059). On the second page of the memorandum, Larry Shore writes that:

> Regarding the "pinch grip issue, Frito Lay has tested this zipper, having made and extra cross seal jaw to do so. Initial feedback is very very positive and Marc Jurgovan told me this morning he thinks we are there. Zipper dimensional variation and camber issues remain, as to machine repeatability of index tolerance , jaw pressure, and robustness of this critical seal in day-to-day production on all their machines.

(JX 2059, page 2). I also wrote in the left hand margin of page 66 (JX 2033) that the four point seal design reflects sealant placed behind the female zipper profile. This was my idea that I disclosed to Minigrip during our January 26, 1998 meeting (see page 56 of laboratory notebook JX 2033) and which I believe lead to the practical elimination of zipper stripping.

96. On page 72 of my laboratory notebook (JX 2033), I pasted the results of testing conducted on March 19, 1998 on the Woodman Polaris modified bag maker at Frito Lay using the revised zipper described above in paragraphs 82-83 and standard Frito-Lay film. As reflected on the top of the page, the results of the first three trials showed no pinch grip failures. I entered this information into my laboratory notebook on March 23, 1998. These tests provided additional confirmation that the pinch grip design worked for its intended purpose.

97. The data pasted into my laboratory notebook (JX 2033) on pages 69 through 73 was input by me into my computer immediately after the trials were performed.

98. I prepared a memorandum, dated April 9, 1998, entitled "Period 4 Status Report" in connection with my responsibilities on the bag reclosure project. This memo was sent to Marty Dierl and Donna Diermeier, with copies to Steve Callahan, Bill Derkach, Ed Edwards, Don Keel, Jerry Reaves and Steve Tucker. A copy of this memorandum is attached as JX 2061.

I report in this memorandum that "proof of principle" testing of the pinch grip application and bag design was successfully accomplished during Period 4. I state that "[w]ork continues on optimizing zipper thickness, seal and location, and zipper application robustness," and that "[u]pon proper zipper application, bag and zipper durability from repeated openings is excellent." The blanked out portion of the memo reflects advice from legal counsel regarding patent matters.

98. I prepared a memorandum entitled "RECLOSABLE PACKAGING Woodman Polaris Interim Development Report," dated April 13, 1998, in connection with my responsibilities on the bag reclosure project. The memo was addressed to Ross Long of the Woodman Company, with copies to Ted Baumgartner, Marty Dierl, Donna Diermeier, Ed Edwards, Don Keel, Steve Mulder, Jerry Reaves and Steve Tucker. A copy of this memorandum is attached as JX 2062. In this memorandum, I discuss the modifications made to the Woodman Polaris bag making equipment to improve the overall operational accuracy of the bag maker for the pinch grip openable, reclosable bag.

99. During the period of December 1997 to May 14, 1998 I had numerous discussions with the outside Frito-Lay patent attorneys (Rothwell, Figg, Ernst & Kurz) regarding the preparation of a patent application covering the pinch-grip reclosable bag invention that I made as described above.

100. In early December 1997 I had a discussion with Bart Newland of the Rothwell, Figg firm regarding the pinch-grip invention. That contact is reflected on page 86 of JX 2051, which indicates that Bart Newland called me on December 2, 1997.

101. I had another conversation with Bart Newland on January 23, 1998 regarding my invention and the scope of a possible patent application. My notes of this conversation are set

forth on page 117 of JX 2051, but have been blanked because they reflect my request for legal advice and Mr. Newland's response.

102. During the following weeks, I had a number of conversations with Stephen Parker of Rothwell, Figg, who was the attorney who was drafting my patent application. On April 20, 1998, I received a fax from Mr. Parker that included the first draft of my patent application. A copy of the fax cover sheet is attached hereto as JX 2064. I reviewed the draft application, and promptly provided my comments and changes to Mr. Parker.

103. On May 6, 1998 I received another fax from Mr. Parker that included a revised draft of my patent application. A copy of the fax cover sheet is attached hereto as JX 2065. I reviewed the revised draft application, and promptly provided my comments and changes to Mr. Parker.

104. On May 13, 1998 I received another fax from Mr. Parker that included a further revised draft of my patent application. A copy of the fax cover sheet is attached hereto as JX 2066. I reviewed the further revised draft application, and promptly provided my comments and changes to Mr. Parker.

105. On May 14, 1998 I received yet another fax from Mr. Parker that included several revised pages of my draft patent application. A copy of the fax cover sheet is attached hereto as JX 2067. I reviewed those revised pages, and promptly provided my comments and changes to Mr. Parker.

106. Later on May 14, 1998 I received another fax from Mr. Parker that included the final version of my patent application, as well as a declaration and assignment for my signature. A copy of the fax cover sheet is attached hereto as JX 2068. I reviewed the papers that were sent to me, signed the declaration and assignment, and sent them back to Mr. Parker.

107. The blanked portions on the following documents reflect requests for legal advice to legal counsel and/or legal advice obtained from counsel in response to those requests relating to patenting issues regarding the pinch-grip invention: JX 2033, page 47 (summary of meetings with Tom Schur on October 16, 1997 and November 12, 1997); JX 2033, page 48 (letter from Tom Schur to Bart Newland); JX 2051, pages 59 and 60 (summary of meeting with Tom Schur on October 16, 1997); JX 2051, page 69 (notes of meeting with Tom Schur on November 5, 1997); JX 2051, page 107 (notes of conference with Bart Newland on January 14, 1998); JX 2051, page 117 (notes of conference with Bart Newland on January 23, 1998); JX 2051, page 142 (notes of conversation with Steve Parker, outside patent counsel, between March 9 and 18, 1998); JX 2051, page 146 (notes of meeting with Tom Schur on March 23, 1998); JX 2056; JX 2061; JX 2064; JX 2065; JX 2066.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful statements may jeopardize the validity of the '396 patent or '646 application or any patent issued thereon.

Date: JANUARY 19, 2005

Marc A. Jurgovan

TAB F

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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES
(Administrative Patent Judge Sally C. Medley)

MARC A. **JURGOVAN** and MARTIN B. DIERL
Junior Party,
(Patent 5,972,396 and Application 09/372,646),

v.

RONALD L. **RAMSEY**, ARTHUR MALIN, ROBERT HOGAN,
LAWRENCE SHARE and RICHMOND M. SCOTT
Senior Party,
(Application 09/481,729)

Patent Interference No. 105,173

DECLARATION OF STEVEN C. MULDER

I, STEVEN C. MULDER, hereby declare and state as follows:

1. I submit this declaration on behalf of Ronald L. Ramsey, Arthur Malin, Robert Hogan, Lawrence Share, and Richmond M. Scott ("the Senior Party") in connection with Patent Interference No. 105,173.

Ramsey Exhibit 1016
Jurgovan v. Ramsey
Interference No. 105,173

2. I am currently employed by CPOR, Inc. (located in Richmond, Virginia) as its Chief Knowledge Officer. Before joining CPOR, I was employed by Robert Bosch Packaging Technology ("Bosch") from 1993 through 2004. Bosch was (and continues to be) in the business of providing packaging solutions for use in the food and pharmaceutical industries. During that time, I held various positions, including Director of Engineering and Technical Services and Director of Operations and Technical Services.

3. In my various positions at Bosch, I gained skill, expertise and experience in the development and operation of form-fill-seal ("FFS") packaging machines and systems. I am a named co-inventor in a U.S. Patent 6,099,451 (assigned to Bosch) for an apparatus and method for manufacturing a bag with a reclosable zipper.

4. While an employee of Bosch, I often worked closely with personnel at Minigrip, which has longstanding expertise and experience involving zipper technology and its applications in the packaging industry. Minigrip personnel and I worked closely in providing reclosable plastic bag technology using FFS machines. In general, an FFS method involves a process in which a machine (or series of machines) form a plastic container from the bag film, fill the container with the product, and then create the final seals on the container. FFS technology has been long used for food products, although the incorporation of reclosable zippers with FFS technology is a more recent development.

5. In the fall of 1996, I became involved in a project to provide a reclosable packaging solution for Frito-Lay. The technology discussed at that time enabled zipper to be applied across the film (i.e., "transversely," at a 90° angle to the film direction) as the film travels in a FFS machine. This technology enables a zipper bag to be produced by a vertical FFS machine, the machine commonly used to form snack packages.

6. Frito-Lay sought to test the feasibility of using Bosch's VFFS zipper application system to develop reclosable plastic bags with Minigrip zipper technology on Frito-Lay film. At the time, I also had discussions with Marc Jurgovan and others at Frito-Lay about Bosch providing retrofit kits for Frito-Lay's existing equipment.

7. After I began work on the Frito-Lay project in the fall of 1996, I attended the Packaging Machinery Manufacturers Institute's ("PMMI") trade show in November 1996 in Chicago, Illinois. That trade show (known at Pac Expo '96) showcased developments and innovations by various companies in the packaging industry. At that show, Bosch attended and had a display with a VFFS machine that produced reclosable packaging using Minigrip TD zipper. During the show, Bosch produced demonstration TD zipper packages that were intended to be opened by cutting the top seal and then separating the zipper profiles from the top (consumer side) of the bag.

8. However, because we did not always have a scissors to cut the top seal to access the zipper, Bob Hogan (a Minigrip representative at the show) and I opened demonstration packages by applying an outward force on the side walls of the package below the closed zipper, so as to cause the zipper to open from the product side and then the top seal to pop open. A photocopy of the package similar to the bags opened as described above is Ramsey Exhibit 1063.

9. I had many meetings and phone calls with Mr. Jurgovan during the course of the Frito-Lay project. In those meetings (which often included Minigrip), I and Minigrip representatives provided quite a lot of information about transverse application of resealable zippers to plastic bags. It was my experience that Mr. Jurgovan and the Frito-Lay team had little

experience in the field of reclosable bag technology, and certainly much less experience than I and the Minigrip personnel had.

10. At some point in early 1997, Mr. Jurgovan asked Minigrip (and Bosch) to develop technology that minimized package failure when bags that could be made on the Bosch VFFS machine were opened via a "pinch grip" method. He stated that request in very general terms and left it to Minigrip (and Bosch) to develop the technology. I understood that Mr. Jurgovan now contends that he conceived of a pinch grip reclosable bag and specified that the internal opening force had to be lower and approach the "bond strength of the film." While I suspect that he had previously gotten information about internal opening force from Minigrip, it would self-evident to one skilled in the art that the internal opening force of the zipper on a pinch grip openable bag would have to be less than the force needed to either separate the zipper from the film or deform the film itself.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with my knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code.

Date: 24 March, 2005

Steven C. Mulder

TAB G

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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES
(Administrative Patent Judge Sally C. Medley)

MARC A. **JURGOVAN** and MARTIN B. DIERL
Junior Party,
(Patent 5,972,396 and Application 09/372,646),

v.

RONALD L. **RAMSEY**, ARTHUR MALIN, ROBERT HOGAN,
LAWRENCE SHARE and RICHMOND M. SCOTT
Senior Party,
(Application 09/481,723)

Patent Interference No. 105,173

DECLARATION OF ROBERT E. HOGAN

I, ROBERT E. HOGAN, hereby declare and state as follows:

1. I submit this Declaration in connection with the Motion for Judgment by Senior Party Ronald L. Ramsey, Arthur Malin, Lawrence Share, Richmond M. Scott and myself. The

Ramsey Exhibit 1012
Jurgovan v. Ramsey
Interference No. 105,173

information set forth below is based on my personal knowledge or upon my review of documents.

2. I am employed by Illinois Tool Works Inc. ("ITW") as Director, Sales and Marketing of its Minigrip/Zip-Pak division ("Minigrip"). I have been employed by ITW for 21 years, and have held my current position for 12 years. In my current position, I have global sales and marketing responsibility for Minigrip's products. I have been involved in the packaging industry for a total of 17 years, and have been in reclosable packaging for 12 years.

3. I am the named inventor (or co-inventor) on four patents concerning reclosable plastic packaging and zipper technology, and am one of the inventors on Application 09/481,723, which is the Senior Party in this interference.

4. Minigrip introduced "toothless" zipper for packaging in the United States has over 50 years of experience in reclosable plastic packaging, including designing, developing, and producing zipper technology for such packaging. Stated most basically, the zipper used in this technology consists of two interlocking plastic strips that are either sealed to the side wall of plastic sheet material (often known as the bag film) or extruded as part of the film itself. The plastic strips have what are sometimes called engagement members or profiles, one of which is commonly referred to as the male profile and the other as the female profile. The engagement members allow the zipper to interlock and separate, repeatedly.

5. One common application of Minigrip's zipper technology is on reclosable packages that contain consumer products, often food products, made using form, fill and seal ("FFS") technology and methods. In general, an FFS method involves a process in which a machine (or series of machines) form a plastic container from the bag film, fill the container with the product,

and then create the final seals on the container. FFS technology has been long used for food products, although the incorporation of reclosable zippers with FFS technology is a more recent development.

6. Minigrip was instrumental in incorporating reclosable zipper technology into FFS methods that enable consumer goods to be packaged in reclosable plastic containers. One obvious advantage of a reclosable container for those products is that it allows a consumer to reclose the container after being initially opened to preserve the freshness of the remaining contents.

7. Conventional FFS zipper technology allows a consumer to open the package by: (a) opening a tamper-resistant seal; (b) gripping a portion of the package above the zipper (i.e., on what is called the consumer side) to separate the male and female profiles of the zipper from one another; (c) accessing the product in the container, and (d) then closing the package by pressing together the male and female profiles. Because such a package is designed to be reused, one of the inherent design qualities is that the force required to separate the male and female profiles of the zipper from one another is less than the strength of bond of the zipper to the film (if the zipper is sealed) and of the bag material itself. If the bag and zipper did not have such a design, then the zipper opening force would separate the zipper from the wall of the bag or cause the bag to tear or otherwise deform, before the male and female profiles were separated from one another.

8. A common feature of reclosable containers is having zipper with different opening forces for the consumer and product sides. For most FFS applications, Minigrip's zippers have an internal (product side) opening force of 5-6 lbs. per inch, which is high enough so that the

zipper will not pop open inadvertently during manufacture, shipment and handling of the consumer product. By contrast, the external opening force of the zipper is typically 2 lbs/inch. In 1996 and 1997, those qualities of Minigrip zippers were well known to those skilled in the field.

9. In the early 1980s, ITW formed a joint venture called Zip-Pak with the Dow Chemical Company, a major supplier of packaging film to promote zipper packaging for food products. ITW eventually purchased Dow's interest in the joint venture. Beginning in the mid-1980s, Minigrip had discussions with Frito-Lay about incorporating Mingrip's zipper technology on Frito-Lay bags.

10. In 1995, Art Malin (another Minigrip employee and one of my co-inventors) and I approached Frito-Lay about possibly using zipper technology on its snack food packaging. At that time, I discussed with Stephen Callaghan (and possibly others) at Frito-Lay a Minigrip technology for use on Frito-Lay packaging. That overture did not move forward beyond the initial discussions.

11. In the summer of 1996, Frito-Lay approached me and others at Minigrip and expressed interest in having snack food packages with reclosable zipper technology. One of Mingrip's technologies enabled zipper to be applied across the film (i.e., "transversely," at a 90° angle to the film direction) as the film travels in a FFS machine. This technology, known as "TD" or "transverse direction," was discussed with Frito-Lay in 1996. The technology enables a zipper bag to be produced by a vertical FFS machine, the machine commonly used to form snack packages. That bag would utilize a conventional zipper and hence require a consumer to open the bag from the top (consumer side) of the bag to access the food contents.

12. As indicated in several of the documents from that time frame, one issue was developing a sealing system between the Minigrip zipper and the Frito-Lay film. Larry Share of Minigrip played a large role in testing various sealants for compatibility with Frito-Lay film, and Art Malin did a lot of work investigating possible sealant layers. The sealant issue is discussed in Art Malin's September 1, 1996 memo to me and others at Minigrip. (RX 1017). This issue was also listed as an important agenda item for an October 1996 meeting with Frito-Lay, which I attended along with Art Malin. (RX 1018).

13. At the October 1996 meeting with Frito-Lay, Art Malin and I described the Minigrip technology to apply zipper on Frito-Lay film, and then form, fill and seal packages using Frito-Lay's bag making equipment. As discussed in Marc Jurgovan's notes of that meeting, we told him and others at the meeting that Minigrip's typical TD zipper required a 1.5-2.0 lbs./inch force to open the package from the consumer side, and that the internal opening force would be 5-6 lbs./inch. (JX 2036 at 22). Art Malin and I were discussing opening forces because we knew that Frito-Lay film was a laminate material with relatively low bond strength between the layers. We also informed them that zipper to be used in the project would be produced and initially tested at Minigrip's Orangeburg, New York plant, to ensure its compatibility with the Frito-Lay film.

14. In November 1996, the Packaging Machinery Manufacturers Institute ("PMMI") held its tradeshow ("PacExpo") in Chicago. Bosch Packaging, which makes FFS equipment but uses Minigrip's TD technology, and Minigrip both attended the show. As part of Bosch's booth at the show, it had a VFFS machine that produced TD zipper bags utilizing a three-flange Minigrip zipper. That is, either the male or female profile had flanges on both sides of the zipper track, and the other had a flange only on one side of the track.

15. The demonstration TD zipper bags had a top seal and were intended to be opened by cutting the top seal with a scissors and then separating the zipper profiles from the top (consumer side) of the bag. However, when scissors (or a knife) were not available to cut the top seal, Steven Mulder (a Bosch representative at the show) and I both opened demonstration bags by applying an outward force on the bag walls below the zipper so as to cause the zipper to open from the product side and then "pop" the top seal to open the bag. Thus, we used a pinch grip method to open the sample bags in order to enable us to show individuals the zipper structure of the bags. A photocopy of one such bag is shown at Ramsey Exhibit 1063.

16. Frito-Lay representatives attended the PacExpo trade show and visited the Bosch booth at the show in November 1996. I am virtually certain that at least some of the Frito-Lay representatives saw the demonstration bags being opened with a pinch grip method, as discussed above.

17. Throughout November and December 1996, Minigrip worked on the Frito-Lay project, principally by identifying sealants to be used to adhere zipper to the Frito-Lay film and then testing the sealants.

18. I note that Marc Jurgovan claims that on January 2, 1997 he communicated with me about pinch grip opening. He states that he told me that a pinch grip bag would require a reduced internal opening force perhaps approaching the bond strength of the film. I do not recall whether I had such a conversation with Mr. Jurgovan on January 2, 1997. In any event, whenever Marc Jurgovan first told me that Frito-Lay was requesting zipper technology that would permit pinch grip opening, I told him that such a method would require a zipper opening force lower than the bond strength of the layers of the film.

19. It was evident to me (and would have been to anyone else skilled in the art) that the internal opening force could not exceed the minimum force needed to delaminate or deform the film or separate zipper from the film. By January 2, 1997, I knew from Minigrip's testing of the Frito-Lay film that the internal opening force of the TD zipper had to be reduced for a pinch grip opening bag.

20. Marc Jurgovan's notes also indicate that he asked Minigrip to develop a prototype pinch grip opening bag in the conversation with me on January 2, 1997. However, those notes, if accurate, indicate that redesign of Minigrip zipper for the Bosch machine was discussed. Such information (that Minigrip would have to redesign the zipper) obviously came from me because I understood that a pinch grip opening concept would likely require a redesign of the existing TD zipper.

21. In furtherance of Frito-Lay's desire for zipper technology for a bag that was pinch grip openable, I and others at Minigrip conceived the invention of a pinch grip openable bag. We communicated to Jurgovan and others at Frito-Lay that in order to permit pinch grip opening without delaminating, the zipper also had to have a high enough internal opening force so that the zipper remained closed during the FFS process, as well as during shipment and handling of the bag before the consumer opened it. Art Malin and I discussed this concept in January 1997, and then later communicated the concept to Marc Jurgovan.

22. On January 29-30, 1997, Art Malin and I met with Jurgovan and others at Frito-Lay to discuss ongoing testing of top opening bags and Mingrip's proposals for the pinch grip concept. It was at that meeting that Art Malin and I indicated that on a bag with a lower product

side internal opening force (which was needed for pinch grip openable), the zipper had to stay closed (interlocked) during the FFS process (see JX 2036 at 58).

23. At that meeting, I also told the Frito-Lay representatives that Minigrip could and regularly did vary the inside and outside forces of the zipper, a concept that I had discussed earlier because of the relatively low bond strength of the Frito-Lay film. In addition, Art Malin also drew a sketch showing a three-flange zipper bag. (JX 2036 at 57).

24. In February and March 1997, in response to Frito-Lay's request, Minigrip was developing zipper technology for several different iterations of snack food packaging, including zipper for a bag that could be opened with a pinch grip method. On March 10, 1997, Marc Jurgovan noted in a memo to me that a pinch grip required Mingrip to produce new dies and that the zipper "lock mechanism" must be redesigned. (JX 2038). Although "lock mechanism" is not standard terminology, it clearly refers to the male and female profiles. Again, Mr. Jurgovan learned from Minigrip that this redesign would be necessary, but he and others at Frito-Lay expected this to be a Minigrip development issue. While I dispute his statement that we had not worked with equal opening force zippers in the past (in fact, we did), it was true that a key concern with the low internal opening force identified by Minigrip was whether the zipper would remain closed during the FFS process. As noted above, we had identified that problem early on, and Minigrip was working to solve it.

25. Before March 29, 1997, I and others at Minigrip discussed various zipper designs for use on pinch grip bags, including the idea of reversing the male and female profiles so that the longest flange was on the female profile. Based on those discussions and as noted in Rick Scott's March 29, 1997 memo to me and Ron Ramsey, Minigrip was testing internal opening

forces with TD zipper (with different flange configurations and perforations) on Frito-Lay film for the pinch grip bag (RX 1023).

26. In those tests, Minigrip observed a phenomenon referred to as "cantilever" with the three-flange TD zipper typically used in the VFFS machine. The cantilever effect was the result of the hinged zipper rotating around the hinge point when a pinch grip force was applied, thereby causing the zipper to move away from the bag wall instead of having the male and female profiles disengage. In that memo, Rick Scott advises that adjusting the length of flanges (or whether the long flange was on the male or female side) did not prevent the cantilever effect, and that in order to reduce the opening force, Mingrip would modify the shape and dimensions of the female profile. I regarded this insight as significant because it indicated that we could develop the necessary zipper to enable a workable pinch grip bag to be formed on an FFS machine by modifying certain aspects of the zipper profile. However, as discussed below, Frito-Lay told us shortly thereafter that the pinch grip project was not a priority, and thereafter Frito Lay tabled the project. (see ¶¶ 28 and 29, below).

27. It is my understanding that Mingrip would test each new modified zipper (i.e. zippers with difference profiles and flange dimensions by measuring the internal and external opening forces) to determine whether the zipper met the desired specifications. I understand that Minigrip did such testing for all zippers, including each zipper design that was to be used for pinch grip. As a result, there was no need for Frito-Lay to test the zipper profile for use on bags to be pinch grip openable.

28. In April and May 1997, Minigrip continued to develop zipper specifically for pinch-grip reclosable technology even as Frito-Lay made clear at that time that its priority was

for conventional zipper technology to be used on a top-opening bag. On May 13, 1997, I attended a meeting with Frito-Lay representatives at Minigrip's Orangeburg plant. Most of the discussion focused on top opening reclosable bag applications, with the primary goal to identify a zipper sealant that would work with a film that Frito-Lay was to use in its test marketing study. (RX 1024). At the meeting, Art Malin discussed Mingrip's continued work on pinch grip variations. Marc Jurgovan's follow-up May 14, 1997 memorandum to me confirms that Frito-Lay regarded pinch grip as a third priority at that time and a "Minigrip development issue." (RX 1025).

29. On June 24, 1997, I met with Frito-Lay personnel who decided to continue development of a peel seal concept and suspend efforts on a peelable seal and the pinch grip concepts. Marc Jurgovan sent me meeting minutes (RX 1028), which confirm that Frito-Lay considered the pinch grip project "tabled" until other projects were completed. My notes also confirm that at that meeting Frito-Lay required no action items from Minigrip on pinch grip. (RX 1027). After that meeting, Minigrip focused on delivering several variations of zipper to be used by Frito-Lay for the top-open peel seal concept. However, Minigrip still evaluated zipper for possible use in a pinch grip concept.

30. In July and August 1997, Minigrip was refining the developing of several variants of its E283 zipper, as well as working on the newly-developed E289 zipper.

31. In September 1997, Minigrip continued to test zipper for use in a pinch grip openable bag. As indicated in Mr. Jurgovan's notes, I communicated with him in advance of a September 24, 1997 meeting about the testing done by Rick Scott on zipper that was to be used for a pinch grip bag, and that Minigrip was going to further modify the zipper. (JX 2051 at 46).

On September 24, 1997, I and others at Minigrip met with Frito-Lay personnel and discussed several possible modifications to zipper (e.g., varying the size and number of flanges, and the dimensions of the male and female profiles) in order to reduce the internal opening force to permit pinch grip opening, yet still allow the zipper to stay closed during the FFS process. An example of that continued development effort is a September 24, 1997 drawing by Art Malin of a zipper design for pinch grip openable bag by Rick Scott, Art Malin, and me. (RX 1033). I note that Marc Jurgovan claims that he came up with the idea of having a 2 lb./ 2 lb. zipper for a pinch grip bag in September 1997. However, that was a concept that we had discussed months earlier when I informed him that Minigrip could produce zipper with equal opening forces. In late September 1997, Frito-Lay advised us that it took Minigrip prototype zipper and made pinch grip bags. Frito-Lay reportedly achieved a 30% failure rate on pinch grip zipper bags. At the time, I recall being informed that Frito-Lay did not regard those tests as acceptable. I shared that view as well.

32. In October 1997, Minigrip was continuing to make adjustments to the male and female profiles of the zipper for use on a bag that was pinch grip openable. In an October 21, 1997 email to me (and others), Ron Ramsey described the results obtained by Frito-Lay in several different zippers supplied, and reported that the failure rate was still 30% or greater. (RX 1038). Again, from my point of view, such a failure rate means that we had not yet developed a suitable zipper. I was told that Frito-Lay also did not view those tests as successful.

33. On November 7, 1997, I was informed that pinch grip testing of a three-flange Minigrip E289 zipper with modified male and female profiles resulted in a much lower failure rate (approximately 10%) than previously experienced. This is confirmed in Ron Ramsey's November 7, 1997 memorandum to me. (RX 1042). That memorandum also indicates that

Frito-Lay was prepared to use that zipper (with slight further modification) for a production run for packages to be used in a market test.

34. After the tests done in November 1997, Minigrip and Frito-Lay had further discussions concerning efforts to produce a commercially viable pinch grip reclosable bag using Frito-Lay's existing film.

35. Minigrip continued to refine the pinch grip concept. On January 7, 1998, Ron Ramsey and I met with Frito-Lay personnel to discuss commercialization of the invention, among other issues. As noted in Marty Dierl's January 14, 1998 letter to me, we had discussed refining the concept to identifying an "ideal" solution Frito-Lay, i.e., one that could be successfully commercialized. (RX 1046).

36. On January 20, 1998, I attended an internal meeting at Minigrip, where a variety of opinions were discussed to optimize the zipper for a pinch grip openable bag, such as modifications to the E289 zipper, a different zipper design and other variations that are documented by Minigrip drawings. (RX 1047; RX 1048; RX 1049).

37. On January 26, 1998, Minigrip and Frito-Lay representatives met to discuss the pinch grip bag. Minigrip presented several new ideas for optimizing the pinch grip concept.

38. At about that time (in February 1998), Ron Ramsey assumed most of my responsibilities on the Frito-Lay project.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with my knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code.

Date: March 21, 2005

Robert E. Hogan

TAB H

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UNITED STATES PATENT AND TRADEMARK OFFICE

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MARC A. **JURGOVAN** and MARTIN B. DIERL
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(Patent 5,972,396 and Application 09/372,646),

v.

RONALD L. **RAMSEY**, ARTHUR MALIN, ROBERT HOGAN,
LAWRENCE SHARE and RICHMOND M. SCOTT
Senior Party,
(Application 09/481,723)

Patent Interference No. 105,173

DECLARATION OF ARTHUR MALIN

I, ARTHUR MALIN, hereby declare and state:

1. I submit this Affidavit in connection with the Motion for Judgment by Senior Party Ronald L. Ramsey, Robert Hogan, Lawrence Share, Richmond M. Scott and myself. The

Ramsey Exhibit 1011
Jurgovan v. Ramsey
Interference No. 105,173

information set forth below is based on my personal knowledge or upon my review of documents.

2. I am employed by Illinois Tool Works Inc. ("ITW") as Director of New Business Development for its Plastic, Packaging and Printing Group. I have been employed by ITW for 26 years, and have had my current position since October 1999. From July 1994 through October 1999, I was Director of New Business and Technology for ITW's Minigrip/Zip-Pak division ("Minigrip").

3. I have been involved in reclosable zipper technology for over ten years, both in my current position (although I have other areas of responsibility as well) and in my position with Minigrip from July 1994 through October 1999, when my focus was on reclosable zipper technology.

4. I am the named inventor (or co-inventor) on approximately 25 patents concerning reclosable plastic packaging and zipper technology and am one of the inventors on Application 09/481,723, which is the subject of this interference.

5. Minigrip introduced "toothless" zipper for packaging in the United States and has over 50 years of experience in reclosable plastic packaging, including designing, developing, and producing zipper technology for such packaging. Stated most basically, the zipper used in this technology consists of two interlocking plastic strips that are either sealed to the side wall of plastic sheet material (often known as the "bag film") or extruded as part of the film itself. The plastic strips have what are sometimes called engagement members or profiles, one of which is commonly referred to as the male profile and the other as the female profile. The engagement members allow the zipper to interlock and separate, repeatedly.

6. One common application of Minigrip's zipper technology is on reclosable packages that contain consumer products, often food products, made using form, fill and seal ("FFS") technology and methods. In general, an FFS method involves a process in which a machine (or series of machines) form a plastic container from the bag film, fill the container with the product, and then create the final seals on the container. FFS technology has been long used for food products, although the incorporation of reclosable zippers with FFS technology is a more recent development.

7. Minigrip was instrumental in incorporating reclosable zipper technology into FFS methods that enable consumer goods to be packaged in reclosable plastic containers. One obvious advantage of a reclosable container for those products is that it allows a consumer to reclose the container after being initially opened to preserve the freshness of the remaining contents.

8. Conventional FFS zipper technology allows a consumer to open the package by: (a) opening a tamper-resistant seal; (b) gripping a portion of the package above the zipper (on what is called the consumer side) to separate the male and female profiles of the zipper from one another; (c) accessing the product in the container, and (d) then closing the package by pressing together the male and female profiles. Because such a package is designed to be reused, one of the inherent design parameters is that the force required to separate the male and female profiles of the zipper from one another is less than the strength of bond of the zipper to the film (if the zipper is sealed) and of the bag material itself. If the bag and zipper did not have such a design, then the zipper opening force would separate the zipper from the wall of the bag or cause the bag to tear or otherwise deform, before the male and female profiles were separated from one another.

9. A common feature of reclosable containers is having zipper with different opening forces for the consumer and product sides. For most FFS applications, Minigrip's zippers have an internal (product side) opening force of 5-6 lbs. per inch, which is high enough so that the zipper will not pop open inadvertently during manufacture, shipment and handling of the consumer product. By contrast, the external opening force of the zipper is typically 2 lbs/inch. In 1996 and 1997, those qualities of Minigrip zippers were known to those skilled in the field.

10. In the early 1980s, ITW formed a joint venture called Zip-Pak with the Dow Chemical Company, a major supplier of packaging film to promote zipper packaging for food products. ITW eventually purchased Dow's interest in the joint venture. Beginning in the mid-1980's, Minigrip had discussions with Frito-Lay about incorporating Minigrip's zipper technology on Frito-Lay bags.

11. In 1995, Bob Hogan (another Minigrip employee and one of my co-inventors) and I again approached Frito-Lay about possibly using zipper technology on its snack food packaging. At that time, I discussed with Stephen Callaghan (and possibly others) at Frito-Lay a Minigrip technology for use on Frito-Lay packaging. That overture did not move forward beyond the initial discussions.

12. In the summer of 1996, Frito-Lay approached me and others at Minigrip and expressed interest in having snack food packages with reclosable zippers. One of Minigrip's technologies enabled zipper to be applied across the film (i.e., "transversely," at a 90° angle to the film direction on the short side of the package) as the film travels in a FFS machine. This technology, known as "TD" or "transverse direction," was discussed with Frito-Lay in 1996. The technology enabled a zipper bag to be produced by a vertical FFS machine, the machine commonly used to form snack packages. That bag would utilize a conventional zipper and hence

require a consumer to open the bag from the top (consumer side) of the bag to access the food contents.

13. One issue that Minigrip worked on initially was developing a sealing system between the Minigrip zipper and the Frito-Lay film, which was necessary to do regardless of the final technology selected. Larry Share of ITW played a large role in testing various sealants for compatibility with Frito-Lay film. I did a lot of work investigating the possible sealant layers. The sealant issue is discussed in my September 1, 1996 memo to others at Minigrip. (RX 1017). This issue was also listed as an agenda item for an October 1996 meeting with Frito-Lay, which I attended along with Bob Hogan. (RX 1018).

14. At the October 1996 meeting with Frito-Lay, Bob Hogan and I described the Minigrip technology to apply zipper on Frito-Lay film, and then form, fill and seal packages using Frito-Lay's bag making equipment. As discussed in Marc Jurgovan's notes of that meeting, we told him and others at the meeting that Minigrip's typical TD zipper required a 1.5-2.0 lbs./inch force to open the package from the consumer side, and that the internal opening force would be 5-6 lbs./inch. (JX 2036 at 22). Bob Hogan and I discussed opening forces because we knew that Frito-Lay film was a laminate material with relatively low bond strength between the layers. We also informed them that zipper to be used in the project would be produced and initially tested at Minigrip's Orangeburg, New York plant, to ensure its compatibility with the Frito-Lay film.

15. In November 1996, the Packaging Machinery Manufacturers Institute ("PMMI") held its tradeshow ("PacExpo") in Chicago. Bosch Packaging, which makes FFS equipment that uses Minigrip's TD technology, and Minigrip both attended the show. As part of Bosch's booth at the show, it had a VFFS machine that produced TD zipper bags utilizing a three-flange

Minigrip zipper. That is, either the male or female profile had flanges on both sides of the zipper track, and the other had a flange only on one side of the track.

16. The demonstration TD zipper bags had a top seal and were intended to be opened by cutting the top seal with a scissors and then separating the zipper profiles from the top (consumer side) of the bag. However, when scissors (or a knife) were not available to cut the top seal, Bob Hogan opened demonstration bags by applying an outward force on the bag walls below the zipper so as to cause the zipper to open from the product side and then "pop" the top seal to open the bag. Thus, he used a pinch grip method to open the sample bags in order to enable us to show individuals the zipper structure of the bags.

17. Frito-Lay representatives attended the PacExpo trade show and visited the Bosch booth at the show in November 1996. I had detailed conversations with the Frito-Lay representatives at the Bosch booth in front of the FFS machine when the machine was making the bags.

18. Throughout November and December 1996, Minigrip worked on the Frito-Lay project, principally by identifying sealants to be used to adhere zipper to the Frito-Lay film and then testing the sealants.

19. I note that Marc Jurgovan claims that on January 2, 1997 he spoke with Bob Hogan about pinch grip opening. Jurgovan states that he indicated to Bob Hogan that a pinch grip bag would require a reduced internal opening force perhaps approaching the bond strength of the film. At the time, I knew that the internal opening force could not exceed the minimum force that would cause the film to delaminate or deform, which those experienced in reclosable packaging would know as well. I also knew from my work on the sealants that Minigrip's

conventional TD zipper had an internal (product side) opening force that was greater than the bond strength of the Frito-Lay film.

20. After Frito-Lay expressed an interest in having Minigrip develop zipper technology to enable pinch grip opening (in early January 1997), I and others at Minigrip conceived the invention of a reclosable package that was pinch grip openable. We communicated to Marc Jurgovan and others at Frito-Lay that in order to permit pinch grip opening the zipper had to open from the product side without causing the film to delaminate and also had to have a large enough internal opening force so that the zipper remained closed during the FFS process. Bob Hogan and I discussed this concept in January 1997, and then later communicated the concept to Marc Jurgovan at Frito-Lay.

21. Obviously, all steps in the FFS process that imparted an inside opening force on the zipper had to be considered in designing a zipper for a pinch grip openable bag. In January 16, 1997, I spoke with Jurgovan and told him that one characteristic of the zipper would be that it would have to remain closed as an air blast was introduced in the bag. (See JX 2036 at 55).

22. On January 29-30, 1997, Bob Hogan and I met with Jurgovan and others at Frito-Lay to discuss ongoing testing of top opening bags and Minigrip's proposals for the pinch grip concept. At that meeting, I indicated that on a bag with a lower product side internal opening force (which was needed for a pinch grip openable bag), the zipper had to stay closed (interlocked) during the FFS process. (See JX 2036 at 58).

23. In February and March 1997, Minigrip was designing zipper technology for several different iterations of snack food packaging for Frito-Lay, including a zipper for a bag that could be opened with a pinch grip method.

24. On February 26, 1997, I devised a pinch grip openable design and sent a drawing of the concept to Mr. Jurgovan. (RX 1020). Because the document contained information developed by Minigrip, I designated the document "confidential." The design shown on this document is for conventional TD zipper on a FFS machine, but with bag being made inverted so that the top (consumer side) of the zipper profile leads through the FFS machine. With the conventional TD zipper technology on vertical FFS, the inside (product side) of the bag film leads through the machine, and the inside of the closed zipper is subjected to forces as the film travels over the collar. For a zipper with an inside opening force of 5-6 lbs./inch, there is little concern that the zipper will pop open during this conventional TD zipper FFS process.

25. The concept of inverting the bag (or the "graphics" as I referred to it in the drawing sent to Mr. Jurgovan), results in the outside part of the zipper being subjected to higher forces during travel through the FFS machine than the inside part of the zipper. Thus, the inside opening force of the zipper could be lowered with less chance of the zipper popping open during the FFS process. The concept was rejected as impractical because it would require a redesign of all of the printing graphics.

26. On March 10, 1997, Mr. Jurgovan noted in a memo to me and Bob Hogan that a pinch grip openable bag required Minigrip to produce new dies and that the zipper "lock mechanism" must be redesigned. (JX 2038). Although "lock mechanism" is not standard terminology, it clearly refers to the male and female profiles. Again, Mr. Jurgovan learned from Minigrip that this redesign would be necessary, but he and others at Frito-Lay expected this to be a Minigrip development issue. While I dispute his statement that Minigrip had not worked with equal opening force zippers in the past (in fact, we did), it was true that a key concern with the low internal opening force identified by Minigrip was whether the zipper would remain closed

during the FFS process. As noted above, we had identified that problem early on, and Minigrip was working to solve it.

27. At a meeting with Frito-Lay on or about March 14, 1997, I produced several drawings of reclosable snack food packages, with some having conventional TD, top-open zipper and others having zipper technology for a pinch grip openable bag. My suggested zipper technology for a pinch grip openable bag was a three-flange zipper, whereas a Frito-Lay representative suggested a four-flange zipper with an equal opening force on the product and consumer side. (See RX 1022). At the meeting (and at other times), I told the Frito-Lay representatives that a four-flange zipper would not work for this in a VFFS machine.

28. Before March 29, 1997, I and others at Minigrip discussed various zipper designs for use on pinch grip bags, including the idea of reversing the male and female profiles so that the longest flange was on the female profile rather than on the male profile as was conventional. Based on those discussions and as noted in Rick Scott's March 29, 1997 memo to me and Ron Ramsey, Minigrip was testing internal opening forces with three-flange TD zipper (with different flange configurations and perforations) on Frito-Lay film for the pinch grip bag. (RX 1023).

29. In those tests, Minigrip observed a phenomenon referred to as "cantilever" with the three-flange TD zipper typically used in VFFS machines. The cantilever effect was the result of the hinged zipper rotating around the hinge point when a pinch grip force was applied, thereby causing the zipper to move away from the bag wall instead of having the male and female profiles disengage. In that memorandum, Rick Scott advises that adjusting the length of flanges (or whether the long flange was on the male or female side) did not prevent the cantilever effect, and that in order to reduce the opening force, Minigrip would modify the shape and dimensions of the male and female profiles. (RX 1023). I regarded this insight as significant because it

indicated that we could develop the zipper technology to enable a workable pinch grip bag formed on an FFS machine by modifying certain aspects of the zipper profile. However, as discussed below, Frito-Lay told us shortly thereafter that the pinch grip project was not a priority, and that Frito Lay tabled the project. (See paragraphs 31 and 32 below).

30. Minigrip would test each new modified zipper, i.e., zippers with differing profiles and flange dimensions by measuring the internal and external opening forces to determine whether the zipper met the desired specifications and, in this case, whether the zipper could be used in pinch grip applications. I understand that Minigrip did such testing for all of its zippers, including each zipper design that was to be used for pinch grip. As a result, there was no need for Frito-Lay to test the zipper profile on bags to be pinch grip openable. Minigrip did send the pre-tested zipper to Frito-Lay because it had a functioning VFFS machine, and Minigrip did not.

31. In April and May 1997, Minigrip continued to develop zipper specifically for pinch-grip openable technology even though Frito-Lay had made it clear at that time that its priority was for conventional zipper technology to be used with a top-opening bag. On May 13, 1997, I attended a meeting with Frito-Lay representatives at Minigrip's Orangeburg plant. Most of the discussion focused on top opening reclosable bag applications, with the primary goal to identify a zipper sealant that would work with a film that Frito-Lay was to use in its test marketing study. (See RX 1024). At the meeting, I told the participants of Minigrip's continued work on pinch grip variations, and specifically discussed that Minigrip could modify the profiles of its existing zipper to reduce the internal opening force, while still having a zipper that could remain closed in the FFS process. Marc Jurgovan's follow-up May 14, 1997 memorandum confirms that Frito-Lay regarded pinch grip as a third priority at that time and a "Minigrip development issue." (RX 1025).

32. Minigrip was working on zipper technologies for three iterations of reclosable packaging using a peel seal, using a peelable seal and pinch grip. The first two used consumer side opening technologies. On June 24, 1997, Minigrip personnel met with Frito-Lay personnel who decided to continue development of the peel seal concept and suspend efforts on the peelable seal and the pinch grip concepts. Marc Jurgovan sent me meeting minutes, which confirm that Frito-Lay considered the pinch grip project "tabled" until other projects were completed. (RX 1028). After that meeting, Minigrip delivered several variations of zipper to be used by Frito-Lay for the top-open peel seal concept. However, Minigrip still evaluated zipper for possible use in a pinch grip concept.

33. In July and August 1997, Minigrip was refining the developing of several variants of its E283 zipper, as well as working on the newly-developed E289 zipper. In approximately early September 1997, Marc Jurgovan indicated that Frito-Lay had a renewed interest in technology for a pinch grip bag. I understood that this request came about because Frito-Lay was having much difficulty in producing a top-open zipper bag (with either a perforation or tear strip) with its standard film, which was oriented polypropylene ("OPP"), because the OPP film was susceptible to tearing when the package was opened.

34. As reflected in Jurgovan's notes, I discussed with Frito-Lay Minigrip's E289 zipper, which Rick Scott was testing for use in pinch grip applications. (JX 2051 at 44).

35. On September 24, 1997, I and others at Minigrip met with Frito-Lay personnel and discussed several possible modifications to zipper (e.g., varying the size and number of flanges, and the dimensions of the male and female profiles) in order to reduce the internal opening force to permit pinch grip opening, yet still allow the zipper to stay closed during the FFS process. An example of that continued development effort is a September 24, 1997 design of a zipper for

a pinch grip openable bag. (RX 1033). That document shows a three-flange zipper with perforated flange on the female side and a modification to the dimensions of the profiles.

36. In late September 1997, Frito-Lay advised us that it took Minigrip prototype zipper and made pinch grip bags on its FFS equipment. Frito-Lay reportedly achieved a 30% failure rate on the pinch grip zipper bags. At the time, I recall being informed that Frito-Lay did not regard those tests as acceptable. I shared that view as well.

37. In October 1997, Minigrip was continuing to modify the male and female profiles of the zipper for use on a bag that was pinch grip openable. In an October 21, 1997 memorandum to me and others, Ron Ramsey described the results obtained by Frito-Lay using several different zippers supplied by Minigrip, and reported that the failure rate was 30% or greater. Such a failure rate means that we had not yet developed a suitable zipper and thus did not reduce the invention to practice. I understand that Frito-Lay also did not regard those tests as successful.

38. In early November 1997, I was informed that testing of a three-flange Minigrip E289 zipper that had both its male and female profiles modified resulted in a much lower failure rate (approximately 10%) than previously experienced. This is confirmed in Ron Ramsey's November 7, 1997 memorandum. (RX 1042). That memorandum also indicates that Frito-Lay was prepared to use that zipper (with slight further modification) for a production run for packages to be used in a market test.

39. After the tests done in November 1997, Minigrip and Frito-Lay had further discussions concerning efforts to produce a commercially viable pinch grip reclosable bag using Frito-Lay's existing film.

40. On January 20, 1998, I attended an internal meeting at Minigrip, where a variety of options were discussed to optimize the zipper for a pinch grip openable bag, such as modifications to the E289 zipper, a different zipper design and other variations that are documented in Minigrip drawings. (See RX 1047, RX 1048, RX 1049).

41. On January 26, 1998, Minigrip and Frito-Lay representatives met to discuss the pinch grip bag. Minigrip presented several new ideas for optimizing the pinch grip concept.

42. One idea, developed by Minigrip was what we called a vacuum (or high compression) zipper. At the meeting, Minigrip also presented a time line of developments in connection with ideas concerning zipper technology for pinch grip openable bags. (RX 1062).

43. As noted in Larry Share's February 16, 1998 memo to me and others, he tested the inside and outside opening forces on the vacuum zipper to determine whether it would be suitable for a pinch grip openable bag. There were follow-up tests, discussions and memoranda concerning using the vacuum zipper and the E289-13 zipper for use in a pinch grip openable bag. (See RX 1055, RX 1057, RX 1059, RX 1060). Those documents indicate that Minigrip was continuing to test the zipper inside and outside opening forces and other characteristics important for application on pinch grip openable bags through March 1998.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with my knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code.

Date: 3-25-05

Arthur Malin

TAB I

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES
(Administrative Patent Judge Sally C. Medley)

MARC A. JURGOVAN and MARTIN B. DIERL
Junior Party,
(Patent 5,972,396 and Application 09/372,646),
v.
RONALD L. RAMSEY, ARTHUR MALIN, ROBERT HOGAN,
LAWRENCE SHARE and RICHMOND M. SCOTT
Senior Party,
(Application 09/481,723)

Patent Interference No. 105,173

VOLUME I OF THE DEPOSITION OF MARC A. JURGOVAN
TAKEN ON TUESDAY, APRIL 26, 2005

* * *

STENOGRAPHICALLY REPORTED BY: JULIA M. BINGHAM
APRIL 26, 2005

A. Yes, I do.
Q. What does that refer to, if you recall?
A. I don't recall the exact context of these notes, but they are typical of attributes that I had -- taking notes on that I had concerns with what the physical application of the -- excuse me, what the physical zipper application onto the bag as well as with how the consumers would use the bags.
Q. Is this reference here of how to open indicate that there was any discussion at this meeting about consumers opening the bag using a pinch-grip method?
A. Absolutely not.
Q. Now, did you attend a trade show in the fall of 1996 in Chicago, Illinois, called Pack Expo?
A. Yes, I did.
Q. Had you previously attended Pack Expos?
A. Yes.
Q. And one of the things you did when you attended -- withdrawn.
How many days were you there at the 1996 show?
A. I don't recall.
Q. One of the things that you did during the 1996 show was attend the Bosch booth; is that right?
A. I did go to the Bosch booth, yes.
Q. And how much time did you spend at the Bosch booth?
A. I don't recall.

Q. And you knew before you went to the meeting -- to the trade show that Bosch was going to have a vertical-form-field machine for TE zipper application there; is that right?

A. Yes.

Q. And one of the purposes of your attending the Bosch booth was to see that machine; is that right?

MR. HYNDS: Objection.

A. No.

Q. What was your purpose in attending the Bosch booth?

A. The Bosch booth?

Q. Yeah.

A. Excuse me. Could you ask your question again?

Q. Yeah. And one of your purposes in attending the Bosch booth was to see that machine; is that right?

MR. HYNDS: Same objection.

A. I'm sorry. I thought your question was with regard to the trade show. Specifically going to the Bosch booth and all suppliers whose booths I visited was looking at new technologies; that's what this trade show offers. So did I specifically go there to see that application, no; did I go there to review their new technologies and to see the machine, yes.

Q. Did other employees from Frito-Lay attend Pack Expo in '96 with you?

A. I don't recall who went to that show.

Q. Did Mr. Dierl attend the show?
A. I don't recall.
Q. Do you know a man named Steve Mulder?
A. Yes, I do.
Q. Who is Steve Mulder?
A. I don't recall his title, but Steve Mulder worked with Bosch and was my counterpart on the project, the person I interacted with with Bosch on the reclosure project.
Q. When you visited the Bosch booth -- withdrawn.
Was Mr. Mulder at the trade show in the fall of 1996?
A. I believe he was, but I can't state that with absolute certainty.
Q. Do you have any -- so you don't have any recollection of speaking with Mr. Mulder at the Bosch booth, do you?
A. I dealt with other people in the Bosch organization. I would have spoken to either Peter Loveland or Steve Mulder, I don't recall who.
Q. While you were at the 1996 trade show did you speak to anybody from Minigrip?
A. I don't recall specifics, but I'm confident that I spoke with someone at the show.
Q. Do you recall --
A. Probably Mr. Hogan.
Q. In connection with the preparation for this examination did you read Mr. Mulder's declaration?

MR. HYNDS: Objection.

You may answer.

A. Yes, I did.

Q. Did you read Mr. Hogan's declaration?

A. Yes, I did.

Q. And you understand that both Mr. Hogan and Mr. Mulder say they opened demonstration bags at the Pack Expo show using a pinch-grip method; is that right?

A. They stated that they opened bags using different ways, yes.

Q. And one of those ways that both of them said is they opened up a zippered bag using a pinch-grip method. That was in both of their declarations; is that right?

A. I don't recall if that's the exact wording that they used. Was that the exact wording that they used?

Q. I'm not purporting to quote it, but I'm saying in substance they both indicated that at the bag they opened -- at the show they opened bags using a pinch-grip method.

MR. HYNDS: Objection.

Q. Do you recall reading that in substance in both of their declarations?

A. I recall reading that they opened bags in different ways; I don't recall whether they used the term pinch grip in their declaration.

Q. Did you observe package's being made on the

demonstration VFFS machine at Bosch? At the Bosch booth, I'm sorry.

A. Yes.

Q. Did you see either Mr. Hogan or Mr. Mulder open bags that were made at the booth?

A. I don't recall watching anyone open any bags because my focus was on the equipment application. My due diligence was around the zipper application and how it was being applied to the machine.

Q. Did Mr. -- did Mr. Hogan or Mr. Mulder ever indicate to you that they had opened bags at the show using a pinch-grip method?

A. Absolutely not.

Q. Did anyone else indicate to you at or about the time of November of 1996 that such a demonstration was made by either Mr. Mulder or Mr. Hogan at the Pack Expo?

MR. HYNDS: Objection.

A. What demonstration? Can you be more specific, please?

Q. Demonstration opening up a zippered bag using a pinch-grip method.

A. Absolutely not.

Can we take about a two-minute break?

Q. Sure. Let's go off the record.

(RECESS)

A. Yes. I'm sorry. I got confused with the question. Yes. The zipper opening force that I'm referring to is the sealed -- is based on must approach or be lower than the bond strength of the sealed film when opened, and that was in order to deliver a similar bag-opening experience to the consumer. And that's based off of my initial concept of having four flanges sealed, two zipper flanges on each side sealed to the bag walls. That would eliminate the risk of the zipper stripping off of the film. The commercial reduction to practice did not -- did not employ four flanges of zippers because of some equipment constraints.

Q. Did you just indicate that your initial concept involved a zipper with four flanges?

A. Yes. If you look on Page 2.

Q. Okay. You had indicated to me that you initially conceived the invention in December; is that right?

A. Yes, I did.

Q. And at the time of your initial conception did you have an idea that the zipper would have four flanges?

A. I was trying to -- during that time I did laboratory experimentation. When I say "that time," I'm talking late December, early January -- late December 1996 into 1997 -- into January 1997. And I did a lot of laboratory experiment and, in fact, I had a laboratory reduction to practice of this actual concept where I took zippers, zipper samples, inverted

them and enabled them to be opened in a manner consistent with typical Frito-Lay salty snack bags.

I didn't have any records of this and it's not referenced in the documents, as it was laboratory experimentation. I was trying to identify at the time ways to implement reclosable packaging in a manner that would allow consumers to open bags consistent with their usual bag-opening experiences, which is the pinch-grip method.

So I was ideating around with the existing Minigrip zippers and saw constraints present with that, and also ideated around the four-flanged, four-seal concepts which I've included in the laboratory notebook.

MR. BROWN: Move to strike as nonresponsive as well.

MR. HYNDS: I disagree with that characterization, but move forward.

MR. BROWN: It's my understanding I have to preserve the motion, so I'm making the motion.

Is Page 1 of Exhibit 2033, is that the only page of this particular document that reflects communications that you had with Mr. Hogan on January 2nd?

MR. HYNDS: Could I have that back again, please?

(REPORTER READS THE RECORD)

MR. HYNDS: Objection.

A. Yes. I think that's correct.

Q. Is there anywhere on this page where you actually

without stripping the zipper off of the side wall of the bag, yes.

Q. Had you previously performed any tests with a three-flanged zipper using a pinch-grip method before making this diagram?

A. I had performed tests with three -- yes, is the answer to your question.

Q. When did you do those tests?

A. I don't have specific recollection of dates, but I was evaluating packaging samples in both December and January of 1996 and 1997, respectively.

Q. And the results of these tests are found nowhere in any document, as far as you know; is that right?

A. No. They were -- I was making mock-up samples in the laboratory of both -- of different zipper configurations. I took zippers and inverted them in order to enable -- to simulate the lower half of a four-flanged zipper. I also took zipper and the -- the three-flanged zipper, if you will, and performed, as I said, laboratory testing. And as I indicated previously, I did demonstrate in a laboratory with mock-up bags that, using an inverted zipper, that I could achieve a reduced opening force in a manner similar to how consumers would open a bag.

As I said previously, I did not have -- there was no data, per se, and, as such, it was not -- at this point it had

TAB J

Paper ____

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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES
(Administrative Patent Judge Sally C. Medley)

MARC A. **JURGOVAN** and MARTIN B. DIERL
Junior Party,
(Patent 5,972,396 and Application 09/372,646),

v.

RONALD L. **RAMSEY**, ARTHUR MALIN, ROBERT HOGAN,
LAWRENCE SHARE and RICHMOND M. SCOTT
Senior Party,
(Application 09/481,723)

Patent Interference No. 105,173

APPENDIX D—RAMSEY CLAIM CHART RE: ANTICIPATION

COUNT 1:

A flexible package **{RX 1011 ¶¶12, 15; RX 1012 ¶¶11, 14; RX 1016 ¶7; RX 1075 ¶4}** having

An elastomeric front wall and an elastomeric rear wall **{RX 1075 ¶4}**;

said front wall and said rear wall being joined together at a top seal **{RX 1075 ¶4 }**;

said front and rear walls having sufficient strength to resist tearing and deformation under the application of said pinch-grip pulling force during pinch-grip opening **{Not articulated in Jurgovan "conception"}**;

a first zipper part attached to an inside surface of said front wall and having a first engagement member facing said rear wall **{RX 1075 ¶4}**;

a second zipper part attached to an inside surface of said rear wall and having a second engagement member facing said front wall **{RX 1075 ¶4}**;

said first and second engagement members being engaged together **{RX 1012 ¶15; RX 1016 ¶8; RX 1075 ¶4}**;

said top seal being manually pinch-grip openable and said first and second engagement members being manually pinch grip openable under a pinch-grip pulling force applied to said front and rear walls below said engagement members **{RX 1012 ¶15; RX 1016 ¶8; RX 1075 ¶5}**;

and a food product stored inside said package below said first and second engagement members **{RX 1075 ¶4}**.

COUNT 2:

A flexible package **{RX 1011 ¶¶12, 15; RX 1012 ¶¶11, 14; RX 1016 ¶7; RX 1075 ¶4}** having

An elastomeric front wall and an elastomeric rear wall **{RX 1075 ¶4}**;

said front wall and said rear wall being joined together at a top seal **{RX 1075 ¶4 }**;

said front and rear walls having sufficient strength to resist tearing and deformation under the application of said pinch-grip pulling force during pinch-grip opening **{Not articulated in Jurgovan "conception"}**;

a first zipper part attached to an inside surface of said front wall and having a first engagement member facing said rear wall **{RX 1075 ¶4}**;

a second zipper part attached to an inside surface of said rear wall and having a second engagement member facing said front wall **{RX 1075 ¶4}**;

said first and second engagement members being engaged together **{RX 1012 ¶15; RX 1016 ¶8; RX 1075 ¶4}**;

said top seal being manually pinch-grip openable and said first and second engagement members being manually pinch grip openable under a pinch-grip pulling force applied to said front and rear walls below said engagement members **{RX 1012 ¶15; RX 1016 ¶8; RX 1075 ¶5}**;

and a food product stored inside said package below said first and second engagement members **{RX 1075 ¶4}**;

pinch-grip opening said package by manually pulling with a force of at least said pinch-grip pulling force opposite sides of said package below said zipper to open both said zipper by disengaging said first and second engagement members and said top seal from the product side outward in a single pinch-grip opening step **{RX 1012 ¶15; RX 1016 ¶8; RX 1075 ¶5}**;

removing a portion of said food product from said package **{RX 1075 ¶5}**; and

re-closing said package by manually re-engaging said first and second engagement members **{RX 1075 ¶5 }**.

TAB K

Paper ____

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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES
(Administrative Patent Judge Sally C. Medley)

MARC A. **JURGOVAN** and MARTIN B. DIERL
Junior Party,
(Patent 5,972,396 and Application 09/372,646),

v.

RONALD L. **RAMSEY**, ARTHUR MALIN, ROBERT HOGAN,
LAWRENCE SHARE and RICHMOND M. SCOTT
Senior Party,
(Application 09/481,729)

Patent Interference No. 105,173

RAMSEY REPLY
(To Jurgovan Opposition To Ramsey Motion To Exclude Evidence)

INTRODUCTION

Senior Party Ramsey moves, pursuant to 37 CFR §41.121, in reply to Jurgovan's Opposition to Ramsey Motion To Exclude Evidence. Jurgovan's Opposition mistakenly claims that Ramsey's objections were untimely and attempts to avoid the fact that its principal witness, Marc Jurgovan, confirmed that certain portions of his Declaration testimony were not based on personal knowledge. For the reasons set forth herein, the Board should grant Ramsey's motion.

EVIDENCE UPON WHICH RAMSEY RELIES IN SUPPORT OF REPLY

JX 2095 Ramsey's Evidentiary Objections to Evidence Relied On by Jurgovan served May 20, 2005 (previously submitted by Jurgovan).

WHETHER FACTS ALLEGED BY JURGOVAN ARE ADMITTED OR DENIED

1. Admitted.

2. Admitted that Jurgovan served the Declarations; otherwise denied.

3. Admitted.

4. Admitted as that Ramsey did not file objections within 5 business days of January 21, 2005; otherwise, denied.

5. Admitted as to date of Ramsey's objections; otherwise, denied.

ARGUMENT

I. Ramsey Timely Objected to the Admissibility of Mr. Jurgovan's Declaration Testimony on the Basis of Revelations at Mr. Jurgovan's Deposition.

On pages 2-4 of its Opposition, Jurgovan argues that the portions of Mr. Jurgovan's declaration (JX 2020, ¶¶26-32, 34, 36, 37, 41, 65-67 and 70)[1] and laboratory notebook (JX 2033 at 1, 22 and 31) should not be excluded from evidence because Ramsey's objection was untimely. The response is that Mr. Jurgovan's lack of personal knowledge for this testimony was not evident until his deposition testimony, and Ramsey notified Jurgovan of its objection at the

[1] Ramsey does not seek to exclude Paragraph 70 of Mr. Jurgovan's Declaration.

conclusion of the deposition and in writing following receipt of the deposition transcript.

It was not evident from Mr. Jurgovan's Declaration that certain testimony in these areas was not based on personal knowledge. It was not until the April 26, 2005 cross-examination (by deposition) that Ramsey learned that Mr. Jurgovan's declaration testimony on those points was speculative. At the deposition, Ramsey advised of its intention to object to Mr. Jurgovan's declaration based on certain testimony given at that deposition. (JX 2087 161:11-17). Ramsey received a deposition transcript of Mr. Jurgovan's deposition on May 5, 2005, which was subject to review and signature by Mr. Jurgovan, and Ramsey served its written objections on May 20, 2005 (JX 2095), five business days after Jurgovan submitted this deposition in connection with its opposition to Ramsey's Motion for Judgment.

Thus, Jurgovan had notice of Ramsey's objections to Mr. Jurgovan's declaration and deposition testimony on April 26, 2005, and again on May 20, 2005. Jurgovan did not submit supplemental evidence as a result of Ramsey's objections, thereby undercutting its claim of prejudice by the timing of Ramsey's objections. Under the circumstances, the Board should grant Ramsey's motion to exclude Mr. Jurgovan's deposition and declaration testimony. *See* 37 CFR §41.104(b); *Petrie v. Welsh,* 21 USPQ2d 2012, 2014 (BPAI 1991).

On page 3, line 15 - page 4, line 2, Jurgovan asserts that Ramsey's objection to pages 1, 22 and 31 of Mr. Jurgovan's "lab notebook" (JX 2033) is also belated. The response is that it was not until Mr. Jurgovan's deposition testimony that Ramsey understood the unreliable nature of these notebook entries. Specifically, Ramsey had no reason to object to Jurgovan's notebook entries until it learned that Mr. Jurgovan did not make notebook entries of the conversation described on pages 1 and 22 until weeks after the fact (JX 2087 36:4-5) and could not recall speaking to Mr. Mulder about his alleged memorandum. (*See* JX 2087 85:12-16).

II. Mr. Jurgovan Lacks Personal Knowledge To Testify On Certain Issues.

A. The Alleged January 2, 1997 Disclosure To Ramsey.

On page 4, line 19 – page 8, line 2, Jurgovan asserts that Ramsey "mischaracterizes" Jurgovan's personal knowledge of his alleged January 2, 1997 conversation with Steve Mulder and Bob Hogan. The response is that Mr. Jurgovan's deposition testimony reveals his lack of personal knowledge of this January 2, 1997 "conversation." In response to a question about whether he had an independent recollection of his conversation with Mr. Hogan at the time his declaration was prepared, Mr. Jurgovan stated that he "had recollection of the documents, of course, as well as the experiences that I had with experimenting with the bags with the sample packaging materials. Specific recollection of the details of that particular conversation, no." (*See* JX 2087 54:10-17). Mr. Jurgovan also admitted that the only contemporaneous note of what he supposedly said is extremely brief and that he did not record what Mr. Hogan allegedly said to him on January 2, 1997. (JX 2087 44:18 – 45:2).

Mr. Jurgovan now claims "independent recollection" of the conversation based on Mr. Jurgovan's "work with the packaging materials" (*see* Jurgovan Opposition at page 5, lines 11-12; JX 2087 54:10-17), which were "experiments" not mentioned anywhere in Mr. Jurgovan's declaration, not submitted as part of a supplemental declaration, and not recorded by Mr. Jurgovan in any of his notebooks (JX 2087 52:3-5). Jurgovan's assertion that these "experiments" were the basis for Mr. Jurgovan's detailed testimony about his January 1997 conversations with Mr. Hogan strains credulity. Jurgovan's reliance on "contemporaneous notes" to establish personal knowledge is equally unavailing, as the only contemporaneous note on the conversation is an extremely brief notebook entry (JX 2036 at 47).

As the trier of fact, the Board has the power to reject testimony when it does not find that

the witness actually perceived the event about which he is testifying. *See* 3 Jack B. Weinstein and Margaret A. Berger, *Weinstein's Federal Evidence* at §602.03[1][c]. Here, Mr. Jurgovan's Declaration expounds for paragraph after paragraph about a conversation with Mr. Hogan even though Mr. Jurgovan had no recollection of the substance of the conversation or even whether he spoke to Mr. Hogan or Mr. Mulder separately. (JX 2087 40:22-25). In *Unterreiner v. Volkswagen of America, Inc.*, 8 F.3d 1206, 1210 (7th Cir. 1993), the court refused to consider a witness's affidavit on a notice issue that contradicted the witness' testimony, and held that this affidavit did not create a genuine issue of material fact. That holding, not the dissenting opinion in the case cited by Jurgovan, supports exclusion of Mr. Jurgovan's declaration testimony about his conversation with Mr. Hogan in paragraphs 26-32 and 34 about his conversation with Mr. Hogan. *See Reid v. IBM Corp.*, 1997 WL 357969 at *2 (S.D.N.Y. 2001) (subsequent recollection in an affidavit of a matter about which the witness had no recollection at his deposition not considered to create issue of fact).

B. The Alleged January 29-30, 1997 Disclosure To Ramsey.

On page 8, line 5- page 9, line 12, Jurgovan argues that Mr. Jurgovan demonstrated personal knowledge of his alleged communication of his invention to Ramsey on January 29-30, 1997. The response is that when asked if he had sent his "design" to Minigrip before February 26, 1997, Mr. Jurgovan testified at his deposition that "I don't recall the exact timing of when my concept or the drawing for the concept was forwarded to Minigrip" and could not state with certainty that it was done before the January 29-30 meeting. (JX 2087 82:23 - 83:4-5). That admission calls into question whether Mr. Jurgovan has the requisite personal knowledge to testify about discussions of his pinch grip concept with Ramsey on January 29-30 or whether he shared his "design" by the end of January 1997. (*See* JX 2020 ¶¶36, 37). Although Jurgovan

now claims that Mr. Jurgovan was only referring to a particular drawing, he testified that he was not sure when his "concept" was first disclosed to Ramsey. Notably, Jurgovan did not have Mr. Jurgovan attempt to "correct" that testimony.[2] Thus, Mr. Jurgovan's testimony about communicating his "concept" to Ramsey on January 29-30 should not be considered.

C. The "Acknowledgement" in Steven Mulder's February 27, 1997 Letter.

On page 9, line 13 – page 10, line 21, Jurgovan asserts that Mr. Jurgovan had personal knowledge to testify (in ¶41) that Mr. Mulder "acknowledged" Jurgovan's conception. The response is that Mr. Jurgovan lacks such personal knowledge. When asked if he had discussed the contents of the February 27, 1997 letter with Mr. Mulder, Mr. Jurgovan stated that he could not recall the "timing or context of previous discussions" with Mr. Mulder about the contents of the letter and never indicated that he spoke to Mr. Mulder about the letter's contents. (JX 2087 85:12-21). Mr. Jurgovan thus lacks a basis for his claim that Mr. Mulder acknowledged anything about Jurgovan's conception. Jurgovan's contention that this testimony is admissible because Ramsey did not have Mr. Mulder refute it ignores that Jurgovan, as the proponent of the evidence, has the burden to establish its admissibility. Jurgovan's failure to lay a proper foundation means that this testimony should not be considered.

D. Messrs. Reaves and Keel Have Insufficient Personal Knowledge To Testify Regarding The September 1997 Reductions To Practice.

On page 11, line 1 – page 12, line 14, Jurgovan asserts that Messrs. Reaves and Keel had personal knowledge of testing undertaken by Mr. Jurgovan in September 1997. The response is that ¶¶ 3 and 5 of Messrs. Reaves and Keel's Supplemental Declarations merely interpret what Mr. Jurgovan meant by a particular notebook entry, without any indication of personal

[2] Jurgovan's attempt to use hearsay testimony from Mr. Callahan to corroborate Mr. Jurgovan's personal knowledge about a disclosure at the meeting should be rejected. *See* Fed. R. Evid. 802.

knowledge on that issue. While Messrs. Reaves and Keel claim to have witnessed September 1997 testing, their testimony as to a certain success rate (*see* JX 2022 ¶¶23, 24, 25; JX 2023 ¶¶22, 25, 26, 27, 28; JX 2089 ¶2; JX 2090 ¶2) is undermined by their reliance on Mr. Jurgovan's notes and his concession at his deposition that he was not sure how many of the bags were discarded before testing because of defects. (*See infra* at 9). Therefore, their testimony on the "success rate" should not be accorded any weight.

III. Jurgovan's Notebook Entries On January 2, 1997, February 28, 1997 And September 16, 1997 Are Inadmissible Hearsay And Should Be Excluded.

On page 12, line 15 -- page 15, line 15, Jurgovan asserts that certain of Mr. Jurgovan's notebook entries are admissible under the business records exception to the hearsay rule, and that Ramsey's objections were untimely. The response is that Jurgovan promptly objected to these entries based on information learned at Mr. Jurgovan's deposition. First, Ramsey demonstrates at page 3 *supra* that Ramsey made a timely objection to this evidence, and that Jurgovan had ample opportunity to supplement this evidence.

Second, these pages of Jurgovan's notebook do not fall under the business records exception. Pages 1 and 31 of JX 2033 are not contemporaneous recordings, but a purported record of telephone conversations made weeks after the fact. Jurgovan does not dispute that Frito-Lay's lab notebook instructions were that such entries should be made immediately after the observations were made or discussed. Given that fact, and Jurgovan's purpose in attempting to use these notebook pages to prove that he communicated conception to Ramsey, the Board should not consider it. *See Kalnoki-Kis v. Land*, 214 USPQ 636, 640, 1982 Pat. App. LEXIS 34 at *16 (BPAI 1982).

Finally, page 22 of JX 2033 is hearsay, as Jurgovan has not laid a proper foundation for consideration of Mr. Mulder's facsimile as a business record. Jurgovan relied on this document

for the truth of the matter asserted (i.e. as proof of "acknowledgement" and communication of conception) (Jurgovan Priority Brief at page 8, lines 9-16), not merely as "evidence of a conversation." (Jurgovan Opposition page 15, lines 1-2). Jurgovan thus bears the burden of establishing an adequate foundation for its evidence, and has failed to do so.

IV. The Board Should Exclude Certain of Jurgovan's Testimony On Grounds Of Relevance.

On page 15, line 16 - page 17, line 13, Jurgovan asserts that Mr. Jurgovan's deposition testimony is relevant to issues of conception and reduction to practice. The response is that relevant testimony must tend to make existence of any fact more or less probable. *See Pipitone v. Biomatrix, Inc.*, 288 F.3d 239, 245 (5th Cir. 2002). Mr. Jurgovan's testimony about December 1996 "experimentation" and September 1997 reduction to practice has no probative value and should be excluded and accorded no weight.

A. Mr. Jurgovan's Testimony About His December 1996/January 1997 Testing.

On page 15, line 22- page 16, line 21, Jurgovan asserts that his uncorroborated testimony as to December 1996 / January 1997 "experimentation" is relevant to the issue of Jurgovan's conception and reduction to practice. The response is that the lack of any corroboration of this evidence defeats Jurgovan's claims of conception. (*See* Jurgovan Opposition at page 15, lines 7-21). Jurgovan's placing "standard Minigrip zipper material" on film (JX 2087 173:1-3) in an inverted orientation (JX 2087 173:4-10) is not relevant to the issues of conception or undue experimentation. Conception of the Counts necessarily requires that the bag film resist tearing or deformation upon application of a pinch-grip opening force. (*See* Ramsey Priority page 10, lines 13-22; Ramsey Reply pages 1-3, lines 4-7). To be relevant on conception, Jurgovan's testimony must establish that his uncorroborated "experiments" make it more likely that Jurgovan's idea included a concept for a pinch-grip zipper that resisted tearing and deformation.

Jurgovan's "experiments" do nothing of the sort. In light of Jurgovan's own admission that attachment of the zipper to film so as to eliminate tearing and deformation "presents difficulties" (JX 2001 column 7 lines 29-32; JX 2002 page 13, lines 21-23), Jurgovan now offers evidence that his "experiment" attaching standard zipper to Frito-Lay film supports its claim that it had conception of the Counts in December 1996. However, inverting a zipper on a package is not probative on the issues of conception and undue experimentation. Reversals of zipper orientation often occur accidentally by those constructing reclosable packages.[3] Thus, doing what Mr. Jurgovan claims he did --- inverting the zipper on a package --- was not a novel concept and simply demonstrates what was already known- that the bag is "hard to open" from the outside and has a tendency to pop open from the inside. ('429 patent at col. 2, lines 9-10).

This "experiment" is neither evidence of Jurgovan's conception nor proof that Jurgovan's idea did not require undue experimentation to be reduced to practice. As with others before him who had placed zipper inverted on film, Mr. Jurgovan's inversion of the zipper did nothing to demonstrate that zipper technology enabling the package wall to resist tearing and deformation could be developed without undue experimentation (and development of additional inventive ideas). That Mr. Jurgovan never communicated his "experiments" to Ramsey underscores the lack of significance that he accorded them and further highlights the irrelevance of his testimony about those experiments. Accordingly, the Board should exclude Mr. Jurgovan's testimony as to his "experiments" on Rule 402 grounds.

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[3] U.S. Patent Nos. 5,566,429 (issued October 22, 1996) and 5,638,587 (filed July 3, 1996 and issued June 17, 1997) state that such reverse attachment of zipper was well known in the art well before December 1996. ('429 Patent at col. 1, lines 37-43, 53-57, col. 2, lines 3-10; '587 Patent at col. 1, line 57 – col. 2, line 17). Those patents provide solutions to prevent that problem. For the Board's convenience, Ramsey submits copies of these patents.

B. The Testimony About A September 1997 Reduction To Practice.

On page 17, lines 1-13, Jurgovan asserts that Mr. Jurgovan's testimony regarding his September 1997 reductions to practice is relevant, suggesting that Ramsey's objection amounts to no more than a "memory test on minute details." The response is that Mr. Jurgovan's deposition testimony reveals that he could not confirm what tests recorded in his notebook were conducted at what time (JX 2087 127:11 – 129:2). Jurgovan also could not testify as to many of the essential parameters of his testing, such as how many packages were not tested because they had gross mechanical defects. (*See* Ramsey Motion to Exclude at page 12, lines 15-22; JX 2087 125:7-12; 134:1-7; 135:3-8; 134:17-135:2; 136:10-15). Thus, Jurgovan's testimony about a percentage success rate (JX 2020 ¶¶67-68, 70, JX 2022 ¶¶23, 25, JX 2023 ¶¶ 25, 28, JX 2089 ¶2, JX 2090 ¶2), and derivative conclusion that such a success rate established that the "pinch grip bag" worked for its intended purpose are equally untrustworthy.

Such unreliable evidence is excludable. *See Kalnoki-Kis v. Land,* 1982 Pat. App. LEXIS 34 at *14-16, 214 USPQ 636 (refusing to consider the testimony of a witness as to the junior party's alleged reduction to practice as witness did not explain how the testing was conducted, the meaning of the test data or the success or failure of the tests). For the same reasons of unreliability, Jurgovan's evidence is not probative as to whether reduction to practice occurred in September 1997 and thus should not be considered.

V. Jurgovan's Nonresponsive Answers And Testimony In Response To Leading Questions Should Be Excluded.

On page 17, line 14 – page 18, line 13, Jurgovan asserts that Ramsey failed to explain how Mr. Jurgovan's nonresponsive answers and testimony in response to leading questions were relied upon by Jurgovan, and did not show that Ramsey's responses were non-responsive. The response is, first, Ramsey did timely object to Mr. Jurgovan's nonresponsive answers during the

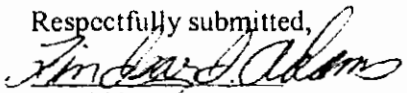
deposition of Mr. Jurgovan (*see* JX 2087 44:1-2, 52:13, 148:20) and upon review of the deposition transcript. (*See* JX 2095).

Second, Jurgovan relied on Mr. Jurgovan's nonresponsive and/or leading deposition testimony in discussing undue experimentation (Jurgovan Priority Opposition 7:16-23, Priority Reply 6:7-8, 7:20-8:6); conception (Jurgovan Priority Opposition 8:1-4); derivation (Jurgovan Priority Reply 5:5-6); and reduction to practice (Jurgovan Priority Reply 12:9-10). Third, Jurgovan's half-hearted contention that Mr. Jurgovan provided responsive, complete testimony to the questions of Ramsey's counsel is refuted by review of the transcript. (*See, e.g.*, JX 2087 41:24– 43:25; 66:4 – 66:19). Finally, the leading questions by Jurgovan's counsel often fed the responses directly to Mr. Jurgovan (*e.g.*, JX 2087 165:18-21; 170:25–171:1), and the "foundational" questions improperly refreshed him on his previous testimony. (*See* JX 2087 165:11-17; 172:2-8). As a result, the Board should not consider Mr. Jurgovan's testimony in response to these questions.

CONCLUSION

For the foregoing reasons, the Board should grant Ramsey's Motion to Exclude.

Respectfully submitted,



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CERTIFICATE OF FILING

The undersigned hereby certifies that a true and correct copy of the foregoing **RAMSEY REPLY** was filed this 21st day of July, 2005, via electronic filing, with the following:

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CERTIFICATE OF SERVICE

The undersigned hereby certifies that a true and correct copy of the foregoing **RAMSEY REPLY** was served on this 21st day of July, 2005, via electronic filing, on the following counsel for Jurgovan:

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TAB L

US005566429A

United States Patent [19]

Martinez et al.

[11] Patent Number: 5,566,429

[45] Date of Patent: Oct. 22, 1996

[54] **EXTRUDED ZIPPER WITH ORIENTING MEANS AND METHOD FOR ORIENTING SAME**

[75] Inventors: **David M. Martinez**, Elmont; **Paul A. Tilman**, New City, both of N.Y.

[73] Assignee: **Minigrip, Inc.**, Orangeburg, N.Y.

[21] Appl. No.: **325,811**

[22] Filed: **Oct. 19, 1994**

[51] **Int. Cl.**[6] **B65D 33/24**

[52] **U.S. Cl.** **24/587**; 24/576

[58] **Field of Search** 24/399, 400, 575–577, 24/587; 383/63

[56] **References Cited**

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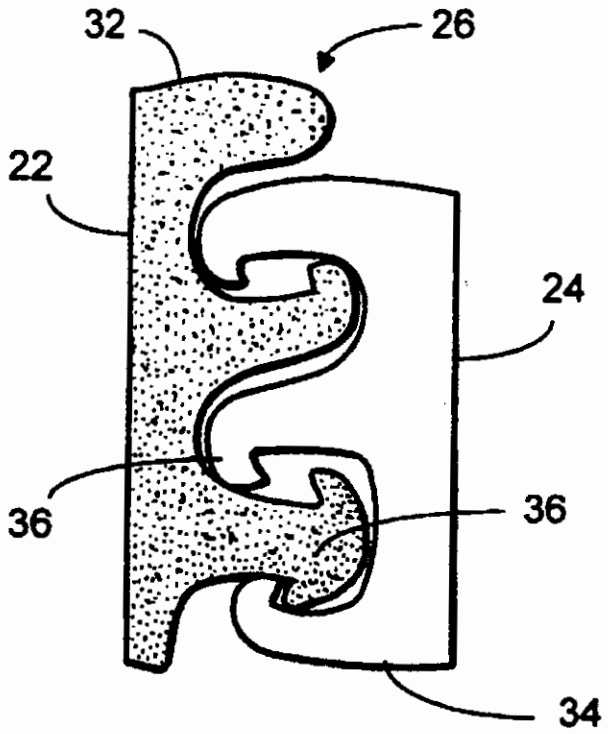
5,185,909	2/1993	Inagaki	24/587
5,248,201	9/1993	Kettner et al.	24/587 X
5,356,222	10/1994	Kettner et al.	24/587 X

Primary Examiner—Peter M. Cuomo
Assistant Examiner—Robert J. Sandy
Attorney, Agent, or Firm—Kane, Dalsimer, Sullivan, Kurucz, Levy, Eisele and Richard, LLP

[57] **ABSTRACT**

A string zipper is provided for use in the manufacture of material for reclosable plastic bags. The string zipper includes a first profile and a complementary mating profile which, when interlocked and properly attached to the bag walls render the bag easy to open from the outside and hard to open from the inside. One of the profiles is formed of polyethylene material that includes an optical brightener to facilitate properly orienting the zipper on a sheet of plastic material. During manufacture of plastic bag material, the zipper is passed through a black light so that the profile containing the brightener can be detected and thus the profiles may readily be distinguished from one another and properly oriented on the sheet material to obtain the desired force differential feature on the final bag.

5 Claims, 1 Drawing Sheet



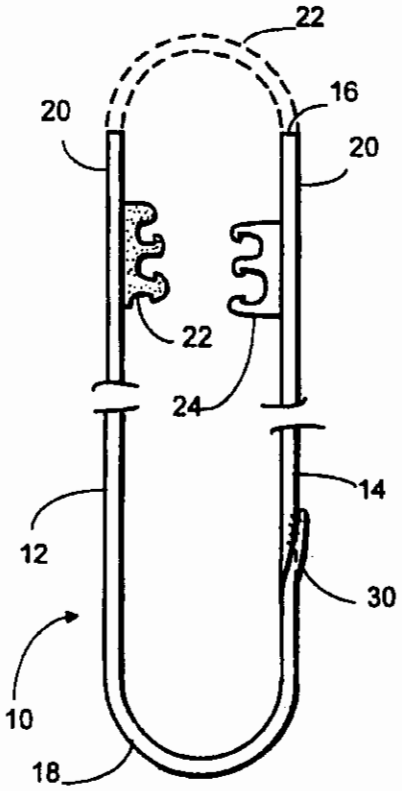


FIG. 1

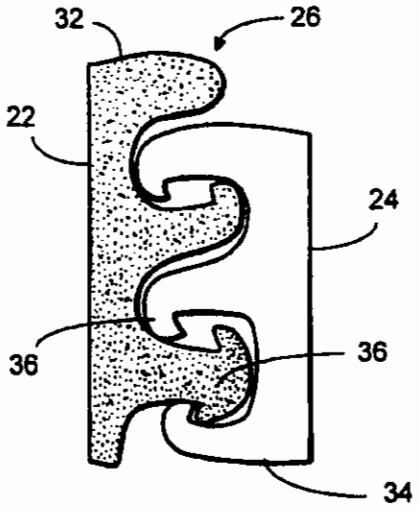


FIG. 2

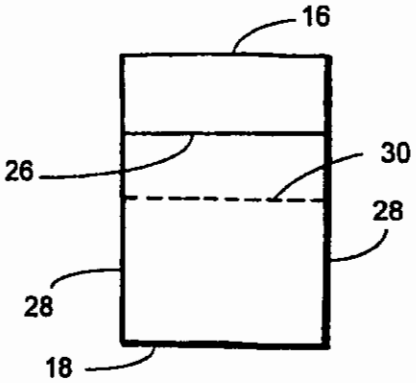


FIG. 3

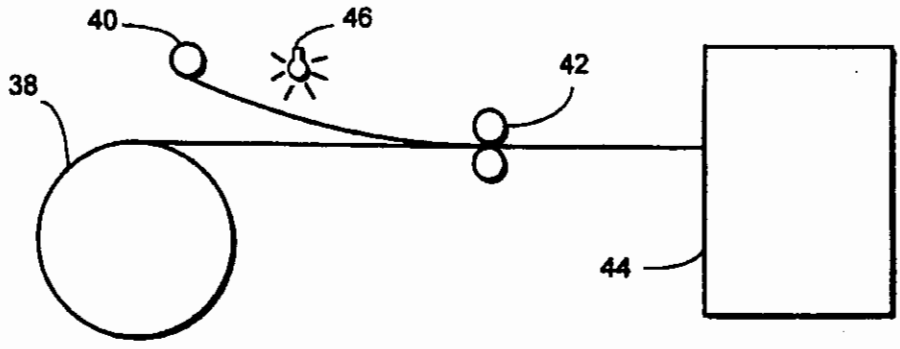


FIG. 4

EXTRUDED ZIPPER WITH ORIENTING MEANS AND METHOD FOR ORIENTING SAME

BACKGROUND OF THE INVENTION

The present invention relates generally to the reclosable plastic bag art and in particular to string zipper used in a method of manufacture of such bags.

The common reclosable plastic bag is provided on one bag sidewall with an extruded profile that interlocks with a complementary mating profile on the opposite sidewall. The profile configurations or method of attachment is such that a greater force is required to open the bag from within than from without. As a result, the bag is rendered relatively easy for the user to open while being capable of resisting internal forces when filled that otherwise would cause the bag to "pop" open.

The force differential required to provide the aforementioned easy-from-outside, hard-from-inside opening operation of the reclosable bag may be obtained by properly configuring the profiles, such as by providing asymmetric male and/or female profiles (for example as disclosed in U.S. Pat. No. 3,198,228) or by providing a post or other means to make opening the bag easier from the outside than the inside (for example as disclosed in U.S. Pat. No. 4,736,451). In either case, the orientation of the zipper on the bag walls is critical to insure that the easy open side is directed toward the bag opening and away from the bag interior.

Reclosable plastic bags are commonly formed of a sheet of plastic material on which the profiles are integrally extruded or to which separately extruded profiles are bonded. The sheet material is formed into a tube, folded flat with the profiles joined and transverse seals are formed to provided the sides for adjacent bags.

Where the profiles are formed integrally with the sheet material their orientation is properly predetermined by the position of the profile dies. However, where the profiles are separately formed and then attached to a sheet, extreme care must be exercised to insure the proper orientation of the profiles. The zipper to be applied to the sheet may be provided with base flanges adjacent to one or both of the profiles or the profiles may be flangeless, providing a so-called "string zipper". A typical string zipper construction is depicted, for example in U.S. Pat No. 5,276,950. In either case, the zipper is usually shipped to a bag converter wound on a spool which is unwound at the zipper attachment equipment station. The zipper attachment equipment may be a stand-alone device or part of a bag fabricating or form, fill and seal machine. In either case, the zipper is usually provided with the profiles already engaged and the profiles remain engaged throughout the bag forming operation until the bag is first opened by an eventual user.

For a conventional reclosable storage bag or formed, filled and sealed food package, the base of the profiles and hence the width of the zipper is on the order of 0.250". Thus, the differences between the easy and hard open sides is quite minute and difficult to detect. The zipper is commonly wound on a spool of sufficient length to provide for between 2 and 3 hours of continuous bag production, after which the spent spool must be replaced with a new spool. Thus the spools are commonly changed several times during a normal production shift. Since the zipper is commonly formed of polyethylene or similar plastic material, it is easily twisted. Thus, during each change of the zipper spool there is the danger of the zipper spool being misoriented and, even if the spool is properly oriented there is the further danger of the zipper coming off the spool twisting prior to being attached. In either case the zipper could be applied with the easy-open side facing the bag interior and the reversal might not be detected until after the bag is filled and first opened by a consumer. This problem is exacerbated by the fact that in most form, fill and seal operations a tamper proof web spans across the lips of the bag. When in place, the web tends to hold the profiles closed even if they are reversed and subjected to forces that otherwise would pop the profiles open. However, once the consumer cuts the web, if the profiles are reversed the defect in the bag becomes evident by rendering the bag hard to open from the outside and having a tendency to pop open from the inside.

SUMMARY OF THE INVENTION

In view of the above, it is a principle object of the present invention to provide an improved string zipper for use in the manufacture of reclosable plastic bags wherein the zipper is provided with indicia of the proper orientation of the easy and/or hard opening sides.

A further object is to provide such indicia in a manner that is readily apparent during the manufacturing process in a production line environment.

A still further object is to provide such indicia in a manner than is not readily apparent in the final bag product and hence does not detract from the aesthetics of the final product.

Yet another object is to provide an improved method of manufacture of reclosable plastic bags that utilizes the improved string zipper.

The above and other beneficial objects and advantages are attained in accordance with the present invention by providing a zipper formed of complementary first and second profile strips. When interlocked, the first profile strip includes a portion defining the top side of the zipper (i.e. designed to be directed toward the bag opening) and the second profile strip includes a portion defining the lower most side of the zipper (i.e. designed to be directed toward the bag bottom). One of the profile strips includes indicia to distinguish that profile strip from the other profile strip. The indicia may, for example, comprise the addition of an optical brightener to the resin from which the profile was extruded or may consist of a stripe or line formed of resin containing the brightener. Such optical brighteners are ordinarily not visible under normal light conditions. However, when viewed under UV enriched light, commonly called "black" light, a distinctive difference becomes readily apparent between the profile strip formed from a resin to which the brightener was added and that formed from resin to which no brightener was added.

During the production of reclosable plastic bags the zipper is passed under a black light upstream of the point at which the zipper is attached to the sheet material, preferably immediately before such attachment. Under the black light the proper orientation of the zipper becomes readily apparent and suitable adjustments may be made to the zipper, by simply twisting the zipper, as required to ensure that the hard-to-open side is directed toward the bag bottom and the easy-to-open side is directed toward the bag top.

BRIEF DESCRIPTION OF THE DRAWINGS

In the accompanying drawings

FIG. 1 is a side elevational view of a reclosable plastic bag provided with a zipper closure formed in accordance with the present invention;

FIG. 2 is an enlarged side elevational view of a zipper in accordance with the present invention depicted with the profiles interlocked;

FIG. 3 is a front elevational view of the bag of FIG. 1 (with the profiles interlocked); and

FIG. 4 is a schematic view of a reclosable plastic bag production line incorporating the present invention.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT:

Reference is now made to the drawings and to FIG. 1 wherein a reclosable plastic bag **10** is depicted formed of a sheet of plastic material folded to define opposed side walls **12** and **14**, a top end **16** and bottom end **18**. The top of the bag is defined by opposed lips **20** which provide convenient pull flanges for the user of the bag to grip to open the bag. A web **22** of the plastic sheet material is often provided above the lips to provide evidence of tampering. That is, before the bag may be opened the web must be removed. Such webs are usually provided for bags formed by food processors on form/fill/seal equipment.

Mating interlocking profiles **22**, **24** are provided on the plastic sheet material at the top of the bag **10** adjacent the bag lips **20**. As shown in FIG. **2**, the profiles define a zipper **26** by which the bag may be repeatedly closed and reopened. During formation of bags, sheet material is "U"-folded or "J"-folded and the folded material is formed into a series of bags by transversely cutting and sealing the tube along seams **28** and the free ends of the sheet material are sealed along a longitudinal seam **30** which may be at the bottom of the bag. The formation of sheet material into plastic bags is well defined and quite well known by those skilled in the art.

As shown in FIG. **2**, the zipper **26** has a top most side portion defining an easy to open side **32** which must face the bag top and a bottom most side portion defining a hard to open side **34** which must face the bag interior. This results basically from the proximity of the engaging barbs of the mating profiles to the side **34** as well as their facing direction. Accordingly, it is important that the zipper **26** be attached to the plastic sheet material in a manner that will direct side **32** of profile **22** toward the bag top and side **34** of profile **24** toward the bag bottom.

Bearing in mind that the base of the profiles is approximately 0.250" it should be obvious that the differences in the zipper **26** when viewed from sides **32** and **34** while critical, is minute. To facilitate the distinction between profiles **22** and **24** one of the profiles (i.e. profile **22**) is extruded from a polyethylene resin to which an optical brightener is added. Such brighteners are available, for example, as PM 1352E7 from Techner PM, Inc. of Rancho Dominquez, Calif. The active ingredient of the brightener is a benzoxazole which provides a fluorescence to the polyethylene resin of the profile. At low levels of UV light, such as is usually available in indoor or outdoor lighting, including fluorescent lighting, the addition of the brightener is not visible. However, when viewed under enhanced UV lighting, such as "black light" the addition of the brightener causes profile **32** to emit a distinctively bright color which may be used to readily distinguish profile **22** (and hence the edge at the easy to open side **32**) from profile **24** (and hence the edge at the hard to open side **34**). The brightener may be added to the entire profile **22** or just to the portion defining the leading edge **32**.

During the production of reclosable plastic bags utilizing zipper **26**, a spool **38** of sheet material and spool **40** of zipper are unwound at constant speed to feed to the zipper and film to a zipper joining station **42** upstream of the bag making equipment **44**. The zipper joining station need not be located in the same plant as the bag making equipment in which case the zippered material (i.e. the sheet material having attached profiles) would have to be respooled and sent to the bag making facility. The zipper joining station **42** may utilize any of many available technologies, (such as utilizing sealing bars or rollers to fuse the zipper and film, adhesives, welding, etc.) to attach the zipper to the film. Upstream of the zipper attaching station **42**) a black light **46** is provided through which the zipper **26** must pass prior to being brought onto the film. Because of the addition of the brightener to profile **22**, the orientation of the zipper **26** may readily be detected and corrected (by simple twisting), as required, to obtain the proper orientation of the zipper on the film to ensure that side **32** of profile **22** will face the top of the completed bag.

Since the brightener is not visible under ordinary lighting conditions, its addition, does not effect the aesthetics of the final bag. Thus, in accordance with the above, the aforementioned objects are effectively attained. It will be understood that variations and modifications may be made effected without departing from the spirit and scope of the novel concepts of the present invention as set forth in the following claims.

Having thus described the invention, what is claimed is:

1. In a zipper for use in the manufacture of a reclosable plastic bag, said zipper being of the type having a first profile for attachment adjacent a pull flange area on one side wall of the bag at a top end of the bag and a complementary profile for attachment adjacent a corresponding pull flange area on an opposite side wall of the bag, said first and complementary profiles interlocking with each other in a manner so as to require less of a force to disengage the profiles when said force is applied to said pull flange areas than when said force is applied from within the bag, the improvement comprising, said profiles having edges directed toward and away from said pull flange areas:

indicia on at least a portion of one of the profiles indicative of the orientation of at least one of said edges of said one profile with respect to its associated pull flange area, said indicia not being visible unless viewed under ultraviolet light.

2. The zipper in accordance with claim **1** wherein when said profiles are interlocked said first profile includes a top most portion of said interlocked profiles and said complementary zipper includes a bottom most portion of said interlocked profiles, and said indicia serves to distinguish the top most portion of said interlocked profiles from the bottom most portion.

3. The invention in accordance with claim 1 wherein said zipper comprises a string zipper.

4. The zipper in accordance with claim **1** wherein said profiles are extruded of a thermoplastic resin and said indicia results from the addition of an optical brightener to the resin from which one of the profiles is extruded.

5. The zipper in accordance with claim **4** wherein said profiles are extruded of polyethylene and said optical brightener comprises a benzoxazole.

* * * * *

TAB M

Paper _____

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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES
(Administrative Patent Judge Sally C. Medley)

MARC A. **JURGOVAN** and MARTIN B. DIERL
Junior Party,
(Patent 5,972,396 and Application 09/372,646),

v.

RONALD L. **RAMSEY**, ARTHUR MALIN, ROBERT HOGAN,
LAWRENCE SHARE and RICHMOND M. SCOTT
Senior Party,
(Application 09/481,729)

Patent Interference No. 105,173

RAMSEY LIST OF ISSUES

The undersigned as counsel for Senior Party Ramsey identifies the following issues to be decided by the Board in Interference No.: 105,173:

I. Whether Jurgovan has established by a preponderance of the evidence that:

- Jurgovan had conception of Counts 1 and 2 at any time.
- Jurgovan had conception of Counts 1 and 2 before Ramsey's first conception of Counts 1 and 2.
- Jurgovan communicated conception of Counts 1 and 2 to Ramsey before Ramsey first had conception of Counts 1 and 2.
- Ramsey derived Counts 1 and 2 from Jurgovan.
- Jurgovan was diligent in reducing any conception of Counts 1 and 2 to practice.
- Ramsey's activities relating to reducing Counts 1 and 2 to practice inure to Jurgovan's benefit.
- Jurgovan reduced Counts 1 and 2 of the Interference to practice at any time between September 1997 and March 6, 1998.
- Jurgovan reduced Counts 1 and 2 to practice in September, 1997.

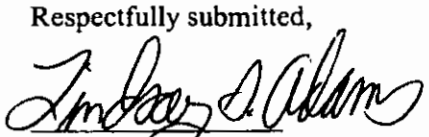
II. Whether Ramsey has established by a preponderance of the evidence that:

- Ramsey had conception of Counts 1 and 2 at any time.
- Ramsey had conception of Counts 1 and 2 before Jurgovan's conception of Counts 1 and 2.
- Ramsey communicated a conception of Counts 1 and 2 to Jurgovan before Jurgovan's first conception of Counts 1 and 2.
- Jurgovan derived Counts 1 and 2 from Ramsey.
- Ramsey was diligent in reducing Counts 1 and 2 to practice from Ramsey's date of

conception through Ramsey's actual and constructive reductions to practice.

- Jurgovan's activities concerning production, construction and testing of resealable packages utilizing Minigrip zipper inured to the benefit of Ramsey.
- Jurgovan's ideas of December 1996/January 1997 for a pinch grip reclosable package were anticipated under 35 U.S.C. §102 by a public display of a pinch grip openable reclosable package in November 1996.

Respectfully submitted,



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Date: June 23, 2005

CERTIFICATE OF FILING

The undersigned hereby certifies that a true and correct copy of the foregoing **RAMSEY LIST OF ISSUES** was filed this 23rd day of June, 2005, via electronic filing, with the following:

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Lindsay S. Adams

CERTIFICATE OF SERVICE

The undersigned hereby certifies that a true and correct copy of the foregoing **RAMSEY LIST OF ISSUES** was served on this 23rd day of June, 2005, via electronic filing, on the following counsel for Jurgovan:

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